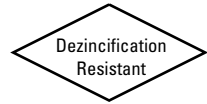


# One-Piece and Two-Piece Bronze Ball Valves

## Illustrated Index

|   |  |   |
|---|--|---|
| <p>One-Piece Bronze Ball Valve<br/>Up to 600 lb. CWP</p>  <p><b>T-560-BR-20/T-560-BR-66</b><br/>Sizes 1/4" thru 2"<br/>Threaded Ends<br/><b>Page 7, 8</b></p>  | <p>Two-Piece Bronze Ball Valve<br/>600 lb. CWP</p>  <p><b>T or S-580-70/T or S-580-70-66</b><br/>Sizes 1 1/4" thru 3"<br/><b>T or S-585-70/T or S-585-70-66</b><br/>Sizes 1/4" thru 2"<br/>Threaded or Solder Ends • Other End Connections<br/><b>Page 9-15</b></p> | <p>Two-Piece Bronze Hose End Ball Valve<br/>600 lb. CWP</p>  <p><b>T or S-585-70-HC/T or S-585-70-66-HC</b><br/>Sizes 1/2" thru 3/4"<br/>Threaded or Solder Ends<br/><b>Page 16, 17</b></p>  |
| <p>Two-Piece Bronze Single Union Ball Valve<br/>600 lb. CWP</p>  <p><b>T or S-585-70-SU</b><br/>Sizes 1/2" thru 2"<br/>Threaded or Solder Ends<br/><b>Page 18, 19</b></p>                                  | <p>Two-Piece Bronze 250 Steam Ball Valve<br/>250 lb. SWP<br/>600 lb. CWP</p>  <p><b>T-585-70-66-ST</b><br/>Sizes 1/2" thru 2"<br/>Threaded Ends<br/><b>Page 20</b></p>   | <p>Two-Piece Bronze Ball Check Valve<br/>250 lb. CWP</p>  <p><b>T-585-70-IC</b><br/>Sizes 1/2" thru 2"<br/>Threaded Ends<br/><b>Page 21</b></p>   |
| <p>Two-Piece Safety Vent Bronze Ball Valve<br/>600 lb. CWP</p>  <p><b>T-580-70-SV</b><br/>Sizes 1 1/4" thru 2"<br/><b>T-585-70-SV</b><br/>Sizes 1/4" thru 1"<br/>Threaded Ends<br/><b>Page 22</b></p>    | <p>Two-Piece UL/LP Gas Bronze Ball Valve<br/>250 lb. CWP</p>  <p><b>T-580-70-UL</b><br/>Sizes 1 1/4" thru 3"<br/><b>T-585-70-UL</b><br/>Sizes 1/4" thru 1"<br/>Threaded Ends<br/><b>Page 23</b></p>   | <p>Two-Piece Act. Mount Bronze Ball Valve<br/>600 lb. CWP</p>  <p><b>AT-580-70-66/GM-585-70-66</b><br/><b>TM-585-70-66/TM-585-70-66-PL</b><br/>Sizes 1/2" thru 2 1/2"<br/>Threaded Ends • Grooved Ends<br/><b>Page 24-27</b></p> |
| <p>Bronze 3-Way Ball Valve<br/>400 lb. CWP</p>  <p><b>T-580-70-W3</b><br/>Sizes 1 1/4" thru 2"<br/><b>T or S-585-70-W3</b><br/>Sizes 1/2" thru 1"<br/>Threaded or Solder Ends<br/><b>Page 28, 29</b></p> | <p>Two-Piece Bronze Ball Valve<br/>400 lb. CWP</p>  <p><b>T or S-580/T or S-580-66</b><br/>Sizes 1/4" thru 2"<br/>Threaded or Solder Ends<br/><b>Page 30, 31</b></p>  | <p>Two-Piece Brass Ball Valve<br/>600 lb. CWP</p>  <p><b>T or S-FP-600</b><br/>Sizes 1/4" thru 4"<br/>Threaded or Solder Ends<br/><b>Page 32</b></p>   |

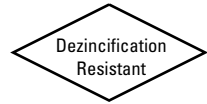
# Three-Piece Bronze Ball Valve Illustrated Index



|   |  |   |
|---|--|---|
| <p>Three-Piece Bronze Ball Valve<br/>600 lb. CWP</p>  <p><b>T or S-590-Y/T or S-590-Y-66</b><br/>Sizes 1/4" thru 3"<br/>Threaded or Solder Ends<br/><b>Page 33, 34</b></p>       | <p>Three-Piece Bronze Ball Valve<br/>600 lb. CWP<br/>250 PSI LP Gas</p>  <p><b>T-590-Y-UL</b><br/>Sizes 1/4" thru 3"<br/>Threaded Ends<br/><b>Page 35</b></p> | <p>Three-Piece Bronze Ball Valve<br/>600 lb. CWP</p>  <p><b>G-590-Y/G-590-Y-66</b><br/>Sizes 1 1/2" thru 3"<br/>Grooved Ends<br/><b>Page 36, 37</b></p>      |
| <p>Three-Piece Bronze Ball Valve<br/>600 lb. CWP</p>  <p><b>T or S-595-Y/T or S-595-Y-66</b><br/>Sizes 1/4" thru 2 1/2"<br/>Threaded or Solder Ends<br/><b>Page 38, 39</b></p> | <p>Three-Piece Bronze Ball Valve<br/>600 lb. CWP</p>  <p><b>TS-595-Y</b><br/>Sizes 1/4" thru 2 1/2"<br/>Threaded x Solder Ends<br/><b>Page 40</b></p>      | <p>Three-Piece Bronze Ball Valve<br/>600 lb. CWP</p>  <p><b>G-595-Y/G-595-Y-66</b><br/>Sizes 1 1/2" thru 2 1/2"<br/>Grooved Ends<br/><b>Page 41, 42</b></p> |
| <p>Three-Piece Bronze Ball Valve<br/>600 lb. CWP<br/>250 PSI LP Gas</p>  <p><b>T-595-Y-UL</b><br/>Sizes 1/4" thru 2"<br/>Threaded Ends<br/><b>Page 43</b></p>                  | <p>Three-Piece Bronze Ball Valve<br/>600 lb. CWP</p>  <p><b>CS-595-YX/CS-595-YX-66/EC</b><br/>Sizes 1/2" thru 2"<br/>Solder Ends<br/><b>Page 44, 45</b></p> | <p><b>Pressure<br/>Temperature<br/>Chart</b></p> <p><b>Page 46</b></p>  |

# Bronze Ball Valves

One-Piece Body • Reduced Port • Bronze Trim • Blowout-Proof Stem



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**

CONFORMS TO MSS SP-110

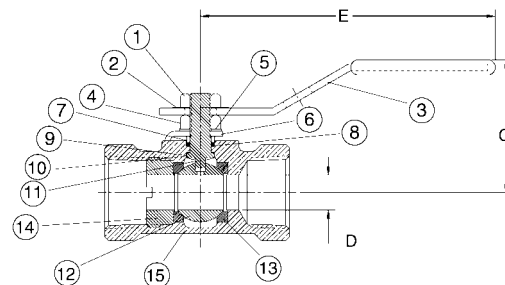
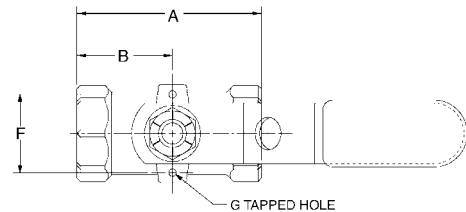
## MATERIAL LIST

| PART                    | SPECIFICATION   |
|-------------------------|---|
| 1. Handle Nut           | Zinc Plated Steel   |
| 2. Identification Plate | Aluminum  |
| 3. Handle               | Zinc Plated Steel Clear Chromate<br>Plastisol Coated              |
| 4. Packing Nut          | Stainless Steel   |
| 5. Belleville Washer    | Zinc Plated Steel   |
| 6. Travel Stop          | Zinc Dichromate Plated Steel                                      |
| 7. Pack Gland           | Brass ASTM B 16 Alloy C36000                                      |
| 8. Packing              | Reinforced TFE  |
| 9. Grounding Washer     | Stainless Steel ASTM A 240 Type 304                               |
| 10. Thrust Washer       | Reinforced TFE  |
| 11. Stem                | Bronze ASTM B 371 Alloy C69400                                    |
| 12. Ball                | Brass ASTM B 124 Alloy C37700<br>or ASTM B 16 Alloy C36000        |
| 13. Seat Ring (2)       | *TFE (Y) or Reinforced TFE (R)                                    |
| 14. Body Insert         | Bronze ASTM B 584 Alloy C84400                                    |
| 15. Body                | Bronze ASTM B 584 Alloy C84400                                    |
| 16. Body End Piece      | Brass ASTM B 16 Alloy C36000 (not shown)<br>1/4 and 3/8 size only |

<sup>1</sup> 1/4"-3/4" ASTM A 582 Type 416. 1"-2" 300 Series.



**T-560-BR-\*-20**  
Threaded



**T-560-BR-\*-20**  
NPT x NPT

## DIMENSIONS—WEIGHTS—QUANTITIES

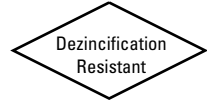
| Size     | Dimensions |         |         |         |          |         |         |      | T-560-BR-*-20 |    | Master Ctn. Qty |
|----------|------------|---------|---------|---------|----------|---------|---------|------|---------------|----|-----------------|
|          | A          | B       | C       | D       | E        | F       | G       | Lbs. | Kg.           |    |                 |
| In. mm.  | In. mm.    | In. mm. | In. mm. | In. mm. | In. mm.  | In. mm. | In. mm. | In.  |               |    |                 |
| 1/4 8    | 2.63 67    | 1.34 34 | 1.63 41 | .38 10  | 4.00 102 | 1.22 31 | 10-24   | .66  | .30           | 50 |                 |
| 3/8 10   | 2.63 67    | 1.34 34 | 1.63 41 | .38 10  | 4.00 102 | 1.22 31 | 10-24   | .63  | .28           | 50 |                 |
| 1/2 15   | 2.63 67    | 1.34 34 | 1.63 41 | .38 10  | 4.00 102 | 1.22 31 | 10-24   | .59  | .27           | 50 |                 |
| 3/4 20   | 2.88 73    | 1.50 38 | 1.71 43 | .50 13  | 4.00 102 | 1.22 31 | 10-24   | .82  | .37           | 50 |                 |
| 1 25     | 3.31 84    | 1.71 43 | 2.00 51 | .63 16  | 4.69 119 | 1.34 34 | 1/4-20  | 1.36 | .62           | 40 |                 |
| 1 1/4 32 | 3.84 98    | 1.97 50 | 2.06 52 | .81 21  | 4.69 119 | 1.50 38 | 1/4-20  | 2.01 | .91           | 20 |                 |
| 1 1/2 40 | 4.03 102   | 2.03 52 | 2.56 65 | 1.00 25 | 6.75 171 | 1.63 41 | 1/4-20  | 2.75 | 1.25          | 20 |                 |
| 2 50     | 4.59 117   | 2.28 58 | 2.75 70 | 1.25 32 | 6.75 171 | 2.06 52 | 1/4-20  | 4.16 | 1.89          | 10 |                 |

Note: G Holes are only tapped for actuated valves.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

One-Piece Body • Reduced Port • Stainless Trim • Vented Ball • Blowout-Proof Stem



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**

CONFORMS TO MSS SP-110

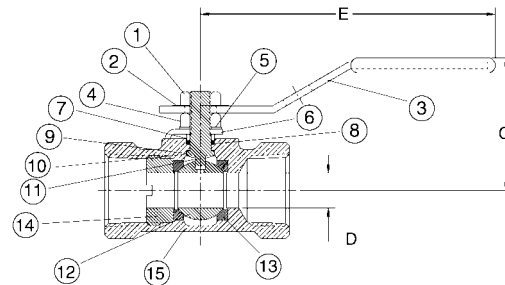
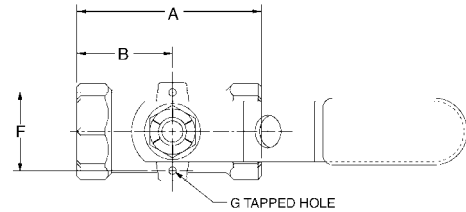
## MATERIAL LIST

| PART                    | SPECIFICATION   |
|-------------------------|---|
| 1. Handle Nut           | Stainless Steel 300 Series  |
| 2. Identification Plate | Aluminum  |
| 3. Handle               | Zinc Plated Steel Clear Chromate<br>Plastisol Coated              |
| 4. Packing Nut          | Stainless Steel   |
| 5. Belleville Washer    | Zinc Plated Steel   |
| 6. Travel Stop          | Zinc Dichromate Plated Steel                                      |
| 7. Pack Gland           | Stainless Steel ASTM A 276 Type 316                               |
| 8. Packing              | Reinforced TFE  |
| 9. Grounding Washer     | Stainless Steel ASTM A 240 Type 304                               |
| 10. Thrust Washer       | Reinforced TFE  |
| 11. Stem                | Stainless Steel ASTM A 276 Type 316                               |
| 12. Ball (Vented)       | Stainless Steel ASTM A 276 Type 316<br>or ASTM A 351 Type CF8M    |
| 13. Seat Ring (2)       | *TFE (Y) or Reinforced TFE (R)                                    |
| 14. Body Insert         | Bronze ASTM B 584 Alloy C84400                                    |
| 15. Body                | Bronze ASTM B 584 Alloy C84400                                    |
| 16. Body End Piece      | Brass ASTM B 16 Alloy C36000 (not shown)<br>1/4 and 3/8 size only |

<sup>1</sup> 1/4"-3/4" ASTM A 582 Type 416. 1"-2" 300 Series.



**T-560-BR-\*66**  
Threaded



**T-560-BR-\*66**  
NPT x NPT

## DIMENSIONS—WEIGHTS—QUANTITIES

| Size     | Dimensions |         |         |         |          |         |         |      | T-560-BR-*66 |     | Master Ctn. Qty. |
|----------|------------|---------|---------|---------|----------|---------|---------|------|--------------|-----|------------------|
|          | A          | B       | C       | D       | E        | F       | G       | Lbs. | Kg.          |     |                  |
| In. mm.  | In. mm.    | In. mm. | In. mm. | In. mm. | In. mm.  | In. mm. | In. mm. | In.  | Lbs.         | Kg. |                  |
| 1/4 8    | 2.63 67    | 1.34 34 | 1.63 41 | .38 10  | 4.00 102 | 1.22 31 | 10-24   | .66  | .30          | 50  |                  |
| 3/8 10   | 2.63 67    | 1.34 34 | 1.63 41 | .38 10  | 4.00 102 | 1.22 31 | 10-24   | .63  | .29          | 50  |                  |
| 1/2 15   | 2.63 67    | 1.34 34 | 1.63 41 | .38 10  | 4.00 102 | 1.22 31 | 10-24   | .59  | .27          | 50  |                  |
| 3/4 20   | 2.88 73    | 1.50 38 | 1.71 43 | .50 13  | 4.00 102 | 1.22 31 | 10-24   | .82  | .37          | 50  |                  |
| 1 25     | 3.31 84    | 1.71 43 | 2.00 51 | .63 16  | 4.69 119 | 1.34 34 | 1/4-20  | 1.36 | .62          | 40  |                  |
| 1 1/4 32 | 3.84 98    | 1.97 50 | 2.06 52 | .81 21  | 4.69 119 | 1.50 38 | 1/4-20  | 2.01 | .91          | 20  |                  |
| 1 1/2 40 | 4.03 102   | 2.03 52 | 2.56 65 | 1.00 25 | 6.75 171 | 1.63 41 | 1/4-20  | 2.75 | 1.25         | 20  |                  |
| 2 50     | 4.59 117   | 2.28 58 | 2.75 70 | 1.25 32 | 6.75 171 | 2.06 52 | 1/4-20  | 4.16 | 1.89         | 10  |                  |

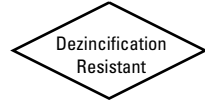
Note: G Holes are only tapped for actuated valves.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Full Port ¼"-1" • Conventional Port 1¼"-3" •  
Bronze Trim • Blowout-Proof Stem

**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**150 PSI/10.3 Bar Saturated Steam\***



CONFORMS TO MSS SP-110

## MATERIAL LIST

| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle Nut          | Zinc Plated Steel  |
| 2. Handle              | Zinc Plated Steel Clear Chromate<br>Plastisol Coated                             |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000   |
| 4. Packing             | TFE  |
| 5. Stem                | Silicon Bronze ASTM B 371 Alloy C69400<br>or ASTM B 99 Alloy C65100              |
| 6. Thrust Washer       | Reinforced TFE   |
| 7. Ball                | Brass ASTM B 124 Alloy C37700 or ASTM<br>B16 Alloy C36000 with Hard Chrome Plate |
| 8. Seat Ring (2)       | Reinforced TFE   |
| 9. Body                | Cast Red Bronze ASTM B 584 Alloy C84400  |
| 10. Body End Piece     | Cast Red Bronze ASTM B 584 Alloy C84400  |

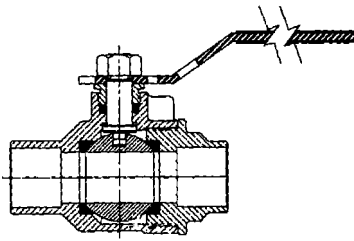
¼" and ¾" sizes have a 304 stainless steel grounding washer.



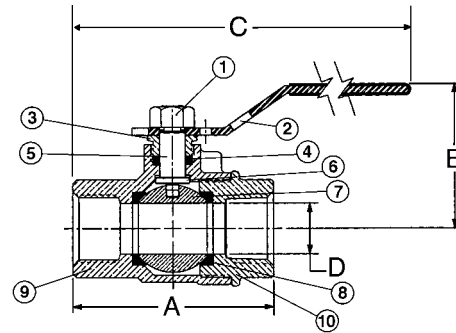
**T-580-70**  
Threaded



**S-580-70**  
Solder



**S-580-70**  
C x C



**T-580-70**  
NPT x NPT

## DIMENSIONS—WEIGHTS—QUANTITIES

| Size | Dimensions |      |     |      |     |      |     |       |     |       | T-580-70 |      | S-580-70 |       | Master Ctn. Qty. |       |      |     |
|------|------------|------|-----|------|-----|------|-----|-------|-----|-------|----------|------|----------|-------|------------------|-------|------|-----|
|      | A          |      | A   |      | B   |      | C   |       | C   |       | D        |      | Lbs.     | Kg.   |                  | Lbs.  | Kg.  |     |
| In.  | mm.        | In.  | mm. | In.  | mm. | In.  | mm. | In.   | mm. | In.   | mm.      | In.  | mm.      | Lbs.  | Kg.              | Lbs.  | Kg.  |     |
| † ¼  | 8          | 2.00 | 51  | 1.75 | 44  | 1.75 | 44  | 5.00  | 127 | 4.75  | 121      | .38  | 10       | .45   | .21              | .42   | .19  | 100 |
| † ⅜  | 10         | 2.00 | 51  | 1.84 | 47  | 1.75 | 44  | 5.00  | 127 | 4.81  | 122      | .38  | 10       | .45   | .21              | .42   | .19  | 100 |
| † ½  | 15         | 2.44 | 62  | 2.56 | 65  | 1.88 | 48  | 5.19  | 132 | 5.25  | 133      | .50  | 13       | .64   | .29              | .60   | .27  | 100 |
| † ¾  | 20         | 2.94 | 75  | 3.25 | 83  | 2.25 | 57  | 6.25  | 159 | 6.25  | 159      | .75  | 19       | 1.33  | .60              | 1.27  | .58  | 50  |
| † 1  | 25         | 3.34 | 85  | 3.75 | 95  | 2.38 | 60  | 6.44  | 164 | 6.63  | 168      | 1.00 | 25       | 1.79  | .81              | 1.72  | .78  | 40  |
| 1 ¼  | 32         | 3.94 | 100 | 4.00 | 102 | 2.63 | 67  | 6.75  | 171 | 6.75  | 171      | 1.00 | 25       | 2.17  | .98              | 1.78  | .81  | 20  |
| 1 ½  | 40         | 4.31 | 109 | 4.44 | 113 | 3.00 | 76  | 8.88  | 226 | 9.00  | 229      | 1.25 | 32       | 3.27  | 1.48             | 2.87  | 1.30 | 20  |
| 2    | 50         | 4.63 | 118 | 5.50 | 140 | 3.16 | 80  | 9.06  | 230 | 9.50  | 241      | 1.50 | 38       | 5.09  | 2.31             | 4.60  | 2.08 | 10  |
| 2 ½  | 65         | 5.84 | 148 | 7.28 | 185 | 3.50 | 89  | 9.66  | 245 | 10.38 | 264      | 2.00 | 51       | 8.25  | 3.74             | 8.18  | 3.71 | 6   |
| 3    | 80         | 7.09 | 180 | 8.78 | 223 | 4.41 | 112 | 11.53 | 293 | 12.38 | 314      | 2.50 | 64       | 15.65 | 7.10             | 14.86 | 6.74 | 4   |

† NIBCO supplies Full Port T or S-585-70 on this size.

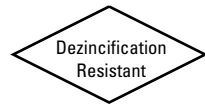
Note: Solder end is designed to be soft-soldered into lines using solders with the melting point not exceeding 500°F.  
Higher temperature solders will damage the seat material. See installation sheet packaged with valves.

\* For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Full Port ¼"-1" • Conventional Port 1¼"-3" •  
Stainless Trim • Blowout-Proof Stem • Vented Ball

**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**150 PSI/10.3 Bar Saturated Steam**♦



CONFORMS TO MSS SP-110

### MATERIAL LIST

| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle Nut          | Stainless Steel 300 Series                                     |
| 2. Handle              | Zinc Plated Steel Clear Chromate<br>Plastisol Coated           |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000                                   |
| 4. Packing             | TFE  |
| 5. Stem                | Stainless Steel ASTM A 276 Type 316                            |
| 6. Thrust Washer       | Reinforced TFE   |
| 7. Ball (Vented)       | Stainless Steel ASTM A 276 Type 316<br>or ASTM A 351 Type CF8M |
| 8. Seat Ring (2)       | Reinforced TFE   |
| 9. Body                | Bronze ASTM B 584 Alloy C84400                                 |
| 10. Body End Piece     | Bronze ASTM B 584 Alloy C84400                                 |

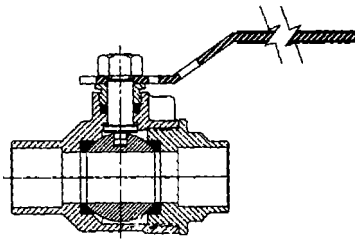
¼" and ¾" sizes have a 304 stainless steel grounding washer.



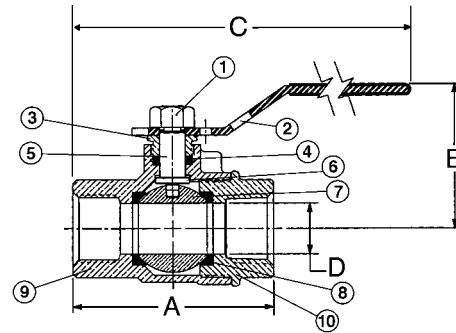
**T-580-70-66**  
Threaded



**S-580-70-66**  
Solder



**S-580-70-66**  
C x C



**T-580-70-66**  
NPT x NPT

## DIMENSIONS—WEIGHTS—QUANTITIES

| Size | T-580-70-66 |      | S-580-70-66 |      | T-580-70-66 |      | S-580-70-66 |       | D   | T-580-70-66 |     | S-580-70-66 |    | Master Ctn. Qty. |      |       |      |     |
|------|-------------|------|-------------|------|-------------|------|-------------|-------|-----|-------------|-----|-------------|----|------------------|------|-------|------|-----|
|      | In.         | mm.  | A           | B    | C           | C    | Lbs.        | Kg.   |     | Lbs.        | Kg. |             |    |                  |      |       |      |     |
| † ¼  | 8           | 2.00 | 51          | 1.75 | 44          | 1.75 | 44          | 5.00  | 127 | 4.75        | 121 | .38         | 10 | .45              | .21  | .42   | .19  | 100 |
| † ⅜  | 10          | 2.00 | 51          | 1.84 | 47          | 1.75 | 44          | 5.00  | 127 | 4.81        | 122 | .38         | 10 | .45              | .21  | .42   | .19  | 100 |
| † ½  | 15          | 2.44 | 62          | 2.56 | 65          | 1.88 | 48          | 5.19  | 132 | 5.25        | 133 | .50         | 13 | .64              | .29  | .60   | .27  | 100 |
| † ¾  | 20          | 2.94 | 75          | 3.25 | 83          | 2.25 | 57          | 6.25  | 159 | 6.25        | 159 | .75         | 19 | 1.33             | .60  | 1.27  | .58  | 50  |
| † 1  | 25          | 3.34 | 85          | 3.75 | 95          | 2.38 | 60          | 6.44  | 164 | 6.63        | 168 | 1.00        | 25 | 1.79             | .81  | 1.72  | .78  | 40  |
| 1 ¼  | 32          | 3.94 | 100         | 4.00 | 102         | 2.63 | 67          | 6.75  | 171 | 6.75        | 171 | 1.00        | 25 | 2.33             | 1.06 | 1.94  | .88  | 20  |
| 1 ½  | 40          | 4.31 | 109         | 4.44 | 113         | 3.00 | 76          | 8.88  | 226 | 9.00        | 229 | 1.25        | 32 | 3.49             | 1.58 | 3.10  | 1.40 | 20  |
| 2    | 50          | 4.63 | 118         | 5.50 | 140         | 3.16 | 80          | 9.06  | 230 | 9.50        | 241 | 1.50        | 38 | 5.16             | 2.34 | 4.67  | 2.12 | 10  |
| 2 ½  | 65          | 5.84 | 148         | 7.28 | 185         | 3.50 | 89          | 9.66  | 245 | 10.38       | 264 | 2.00        | 51 | 8.98             | 4.07 | 8.92  | 4.04 | 6   |
| 3    | 80          | 7.09 | 180         | 8.78 | 223         | 4.41 | 112         | 11.53 | 293 | 12.38       | 314 | 2.50        | 64 | 17.38            | 7.88 | 16.59 | 7.52 | 4   |

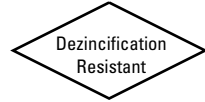
† NIBCO supplies Full Port T or S-585-70-66 on this size.

Note: Solder end is designed to be soft-soldered into lines using solders with the melting point not exceeding 500°F.  
Higher temperature solders will damage the seat material. See installation sheet packaged with valves.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim • Blowout-Proof Stem



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**150 PSI/10.3 Bar Saturated Steam**♦

CONFORMS TO MSS SP-110

## MATERIAL LIST

| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle Nut          | Zinc Plated Steel  |
| 2. Handle              | Zinc Plated Steel Clear Chromate<br>Plastisol Coated                             |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000   |
| 4. Packing             | TFE  |
| 5. Stem                | Silicon Bronze ASTM B 371 Alloy C69400<br>or ASTM B 99 Alloy C65100              |
| 6. Thrust Washer       | Reinforced TFE   |
| 7. Ball                | Brass ASTM B 124 Alloy C37700 or ASTM<br>B16 Alloy C36000 with Hard Chrome Plate |
| 8. Seat Ring (2)       | Reinforced TFE   |
| 9. Body                | Cast Red Bronze ASTM B 584 Alloy C84400  |
| 10. Body End Piece     | Cast Red Bronze ASTM B 584 Alloy C84400  |

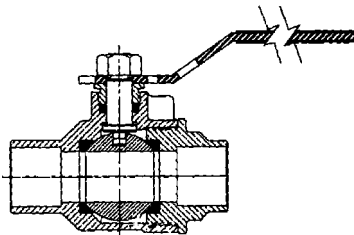
1/4" and 3/8" sizes have a 304 stainless steel grounding washer.



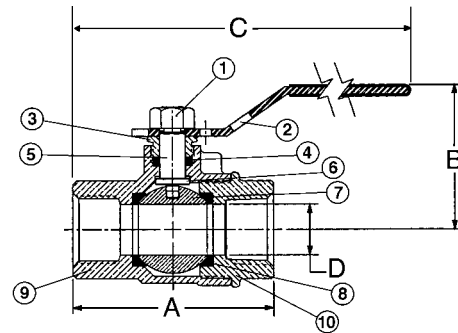
**T-585-70**  
Threaded



**S-585-70**  
Solder



**S-585-70**  
C x C



**T-585-70**  
NPT x NPT

## DIMENSIONS—WEIGHTS—QUANTITIES

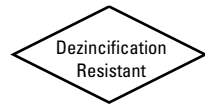
| Size  | Dimensions |      |     |      |     |      |    |      |      |       | T-585-70 |      | S-585-70 |      | Master Ctn. Qty. |      |      |     |
|-------|------------|------|-----|------|-----|------|----|------|------|-------|----------|------|----------|------|------------------|------|------|-----|
|       | A          |      | B   |      | C   |      | D  |      | Lbs. | Kg.   | Lbs.     | Kg.  |          |      |                  |      |      |     |
| 1/4   | 8          | 2.00 | 51  | 1.75 | 44  | 1.75 | 44 | 5.00 | 127  | 4.75  | 121      | .38  | 10       | .45  | .21              | .42  | .19  | 100 |
| 3/8   | 10         | 2.00 | 51  | 1.84 | 47  | 1.75 | 44 | 5.00 | 127  | 4.81  | 122      | .38  | 10       | .45  | .21              | .42  | .19  | 100 |
| 1/2   | 15         | 2.44 | 62  | 2.56 | 65  | 1.88 | 48 | 5.19 | 132  | 5.25  | 133      | .50  | 13       | .64  | .29              | .60  | .27  | 100 |
| 3/4   | 20         | 2.94 | 75  | 3.25 | 82  | 2.25 | 57 | 6.25 | 159  | 6.25  | 159      | .75  | 19       | 1.33 | .60              | 1.27 | .58  | 50  |
| 1     | 25         | 3.34 | 85  | 3.75 | 95  | 2.38 | 60 | 6.44 | 164  | 6.63  | 168      | 1.00 | 25       | 1.79 | .81              | 1.72 | .78  | 40  |
| 1 1/4 | 32         | 4.19 | 106 | 5.06 | 128 | 3.00 | 76 | 6.75 | 171  | 7.19  | 183      | 1.25 | 32       | 3.12 | 1.41             | 3.18 | 1.44 | 20  |
| 1 1/2 | 40         | 4.72 | 120 | 5.99 | 151 | 3.16 | 80 | 9.06 | 230  | 9.69  | 246      | 1.50 | 38       | 4.78 | 2.17             | 5.12 | 2.32 | 10  |
| 2     | 50         | 5.16 | 131 | 6.72 | 170 | 3.50 | 89 | 9.25 | 235  | 10.06 | 256      | 2.00 | 51       | 6.68 | 3.03             | 7.10 | 3.22 | 8   |

Note: Solder end is designed to be soft-soldered into lines using solders with the melting point not exceeding 500°F. Higher temperature solders will damage the seat material. See installation sheet packaged with valves.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Full Port • Stainless Trim • Blowout-Proof Stem • Vented Ball



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**150 PSI/10.3 Bar Saturated Steam**♦

CONFORMS TO MSS SP-110

### MATERIAL LIST

| PART                   | SPECIFICATION   |
|------------------------|---|
| 1. Handle Nut          | Stainless Steel 300 Series                                  |
| 2. Handle              | Zinc Plated Steel Clear Chromate Plastisol Coated           |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000                                |
| 4. Packing             | TFE   |
| 5. Stem                | Stainless Steel ASTM A 276 Type 316                         |
| 6. Thrust Washer       | Reinforced TFE  |
| 7. Ball (Vented)       | Stainless Steel ASTM A 276 Type 316 or ASTM A 351 Type CF8M |
| 8. Seat Ring (2)       | Reinforced TFE  |
| 9. Body                | Bronze ASTM B 584 Alloy C84400                              |
| 10. Body End Piece     | Bronze ASTM B 584 Alloy C84400                              |

¼" and ¾" sizes have a 304 stainless steel grounding washer.



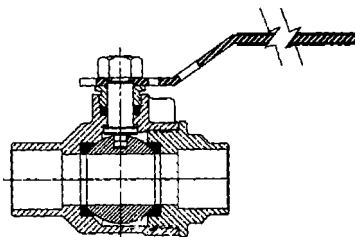
**T-585-70-66**

Threaded

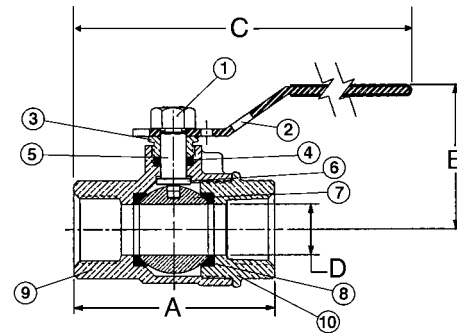


**S-585-70-66**

Solder



**S-585-70-66**  
C x C



**T-585-70-66**  
NPT x NPT

## DIMENSIONS—WEIGHTS—QUANTITIES

| Size    | Dimensions  |         |             |         |             |         |             |         |         |         | T-585-70-66 |         | S-585-70-66 |         | Master Ctn. Qty. |         |      |     |
|---------|-------------|---------|-------------|---------|-------------|---------|-------------|---------|---------|---------|-------------|---------|-------------|---------|------------------|---------|------|-----|
|         | T-585-70-66 |         | S-585-70-66 |         | T-585-70-66 |         | S-585-70-66 |         | D       |         | Lbs.        | Kg.     | Lbs.        | Kg.     |                  |         |      |     |
| In. mm. | In. mm.     | In. mm. | In. mm.     | In. mm. | In. mm.     | In. mm. | In. mm.     | In. mm. | In. mm. | In. mm. | In. mm.     | In. mm. | In. mm.     | In. mm. | In. mm.          | In. mm. |      |     |
| ¼       | 8           | 2.00    | 51          | 1.75    | 44          | 1.75    | 44          | 5.00    | 127     | 4.75    | 121         | .38     | 10          | .45     | .21              | .42     | .19  | 100 |
| ⅜       | 10          | 2.00    | 51          | 1.84    | 47          | 1.75    | 44          | 5.00    | 127     | 4.81    | 122         | .38     | 10          | .45     | .21              | .42     | .19  | 100 |
| ½       | 15          | 2.44    | 62          | 2.56    | 65          | 1.88    | 48          | 5.19    | 132     | 5.25    | 133         | .50     | 13          | .64     | .29              | .60     | .27  | 100 |
| ¾       | 20          | 2.94    | 75          | 3.25    | 82          | 2.25    | 57          | 6.25    | 159     | 6.25    | 159         | .75     | 19          | 1.33    | .60              | 1.27    | .58  | 50  |
| 1       | 25          | 3.34    | 85          | 3.75    | 95          | 2.38    | 60          | 6.44    | 164     | 6.63    | 168         | 1.00    | 25          | 1.79    | .81              | 1.72    | .78  | 40  |
| 1¼      | 32          | 4.19    | 106         | 5.06    | 128         | 3.00    | 76          | 6.75    | 171     | 7.19    | 183         | 1.25    | 32          | 3.34    | 1.52             | 3.40    | 1.55 | 20  |
| 1½      | 40          | 4.72    | 120         | 5.99    | 151         | 3.16    | 80          | 9.06    | 230     | 9.69    | 246         | 1.50    | 38          | 4.84    | 2.20             | 5.18    | 2.35 | 10  |
| 2       | 50          | 5.16    | 131         | 6.72    | 170         | 3.50    | 89          | 9.25    | 235     | 10.06   | 256         | 2.00    | 51          | 7.41    | 3.37             | 7.83    | 3.56 | 8   |

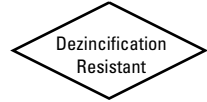
Note: Solder end is designed to be soft-soldered into lines using solders with the melting point not exceeding 500°F. Higher temperature solders will damage the seat material. See installation sheet packaged with valves.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.



# Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim • Thread x Solder (TS) or Solder x Thread End (ST) • Blowout-Proof Stem



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**150 PSI/10.3 Bar Saturated Steam**♦

CONFORMS TO MSS SP-110

## MATERIAL LIST

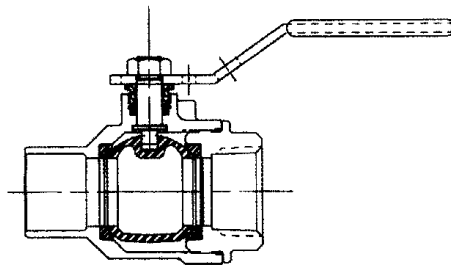
| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle Nut          | Zinc Plated Steel  |
| 2. Handle              | Zinc Plated Steel Clear Chromate Plastisol Coated                              |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000   |
| 4. Packing             | TFE  |
| 5. Stem                | Silicon Bronze ASTM B 371 Alloy C69400 or ASTM B99 Alloy C65100                |
| 6. Thrust Washer       | Reinforced TFE   |
| 7. Ball                | Brass ASTM B 124 Alloy C37700 or ASTM B 16 Alloy C36000 with Hard Chrome Plate |
| 8. Seat Ring (2)       | Reinforced TFE   |
| 9. Body                | Bronze ASTM B 584 Alloy C84400   |
| 10. Body End Piece     | Bronze ASTM B 584 Alloy C84400   |



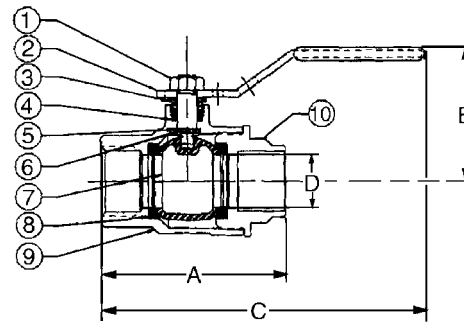
**TS-585-70**  
NPT x Solder



**ST-585-70**  
Solder x NPT



**ST-585-70**  
NPT x C



**TS-585-70**  
NPT x C

## DIMENSIONS—WEIGHTS—QUANTITIES

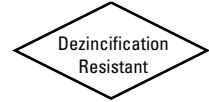
| Size | Dimensions |      |     |      |     |      |     |      |     |       | TS-585-70 |      | ST-585-70 |      | Master Ctn. Qty. |      |      |     |
|------|------------|------|-----|------|-----|------|-----|------|-----|-------|-----------|------|-----------|------|------------------|------|------|-----|
|      | A          |      | A   |      | B   |      | C   |      | C   |       | D         |      | Lbs.      | Kg.  |                  | Lbs. | Kg.  |     |
| In.  | mm.        | In.  | mm. | In.  | mm. | In.  | mm. | In.  | mm. | In.   | mm.       | In.  | mm.       | Lbs. | Kg.              | Lbs. | Kg.  |     |
| ½    | 15         | 2.55 | 65  | 2.40 | 61  | 1.88 | 48  | 5.19 | 132 | 5.25  | 133       | .50  | 13        | .71  | .32              | .62  | .28  | 100 |
| ¾    | 20         | 3.06 | 78  | 3.09 | 78  | 2.25 | 57  | 6.25 | 159 | 6.25  | 159       | .75  | 19        | 1.31 | .60              | 1.29 | .59  | 50  |
| 1    | 25         | 3.53 | 90  | 3.53 | 90  | 2.38 | 60  | 6.44 | 164 | 6.63  | 168       | 1.00 | 25        | 2.36 | 1.07             | 2.35 | 1.07 | 40  |
| 1¼   | 32         | 4.61 | 117 | 4.63 | 118 | 3.00 | 76  | 6.75 | 171 | 7.19  | 183       | 1.25 | 32        | 3.11 | 1.41             | 3.18 | 1.44 | 20  |
| 1½   | 40         | 5.32 | 135 | 5.32 | 135 | 3.16 | 80  | 9.06 | 230 | 9.69  | 246       | 1.50 | 38        | 4.82 | 2.18             | 5.07 | 2.30 | 10  |
| 2    | 50         | 5.93 | 151 | 5.93 | 151 | 3.50 | 89  | 9.25 | 235 | 10.06 | 256       | 2.00 | 51        | 6.59 | 2.99             | 6.34 | 2.87 | 8   |

Note: Solder end is designed to be soft-soldered into lines using solders with the melting point not exceeding 500°F. Higher temperature solders will damage the seat material. See installation sheet packaged with valves.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim • Male x Female Thread Ends • Blowout-Proof Stem

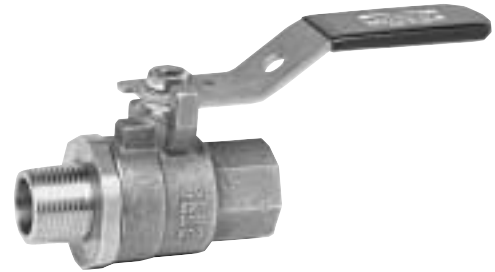


**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**150 PSI/10.3 Bar Saturated Steam\***

CONFORMS TO MSS SP-110

## MATERIAL LIST

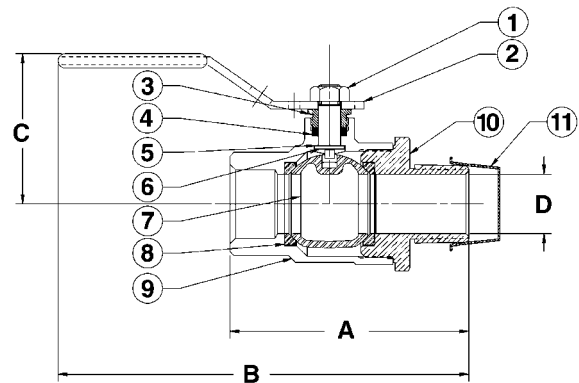
| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle Nut          | Zinc Plated Steel  |
| 2. Handle              | Zinc Plated Steel Clear Chromate Plastisol Coated                              |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000   |
| 4. Packing             | TFE  |
| 5. Thrust Washer       | Reinforced TFE   |
| 6. Stem                | Silicon Bronze ASTM B 371 Alloy C69400 or ASTM B 99 Alloy C65100               |
| 7. Ball                | Brass ASTM B 124 Alloy C37700 or ASTM B 16 Alloy C36000 with Hard Chrome Plate |
| 8. Seat Ring (2)       | Reinforced TFE   |
| 9. Body                | Bronze ASTM B 584 Alloy C84400   |
| 10. Male Body End      | Brass ASTM B 16 Alloy C36000   |
| 11. Cap Plug           | Low Density Polyethylene   |



**MTT-585-70**  
Male x Female NPT

## DIMENSIONS—WEIGHTS—QUANTITIES

| Size  | Dimensions |      |     |      | MTT-585-70 |      | Master Ctn. | Qty. |    |      |      |    |
|-------|------------|------|-----|------|------------|------|-------------|------|----|------|------|----|
|       | A          | B    | C   | D    | Lbs.       | Kg.  |             |      |    |      |      |    |
| 1/4   | 8          | 2.41 | 61  | 5.30 | 135        | 1.75 | 44          | .38  | 10 | .43  | .19  | 40 |
| 3/8   | 10         | 2.40 | 61  | 5.30 | 135        | 1.72 | 44          | .38  | 10 | .52  | .24  | 40 |
| 1/2   | 15         | 2.80 | 71  | 5.50 | 140        | 1.88 | 48          | .50  | 13 | .78  | .35  | 40 |
| 3/4   | 20         | 3.40 | 86  | 6.59 | 167        | 2.25 | 57          | .75  | 19 | 1.54 | .70  | 20 |
| 1     | 25         | 4.00 | 102 | 6.99 | 178        | 2.38 | 60          | 1.00 | 25 | 2.71 | 1.23 | 20 |
| 1 1/4 | 32         | 4.58 | 116 | 9.18 | 233        | 3.00 | 76          | 1.25 | 32 | 3.56 | 1.62 | 10 |
| 1 1/2 | 40         | 5.20 | 132 | 9.53 | 242        | 3.16 | 80          | 1.50 | 38 | 5.34 | 2.42 | 6  |
| 2     | 50         | 5.49 | 139 | 9.61 | 244        | 3.50 | 89          | 2.00 | 51 | 6.83 | 3.10 | 4  |

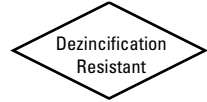


**MTT-585-70**  
Male x Female NPT

\* For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim •  
Body with Chrome Plating • Blowout-Proof Stem



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**

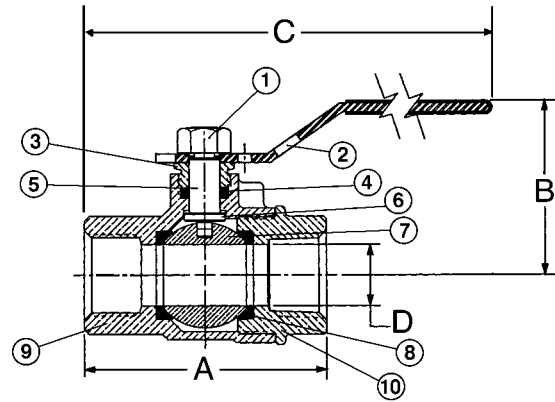
CONFORMS TO MSS SP-110

## MATERIAL LIST

| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle Nut          | Zinc Plated Steel  |
| 2. Handle              | Zinc Plated Steel Clear Chromate<br>Plastisol Coated                                 |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000   |
| 4. Packing             | TFE  |
| 5. Stem                | Silicon Bronze ASTM B 371 Alloy C69400<br>or ASTM B 99 Alloy C65100                  |
| 6. Thrust Washer       | Reinforced TFE   |
| 7. Ball                | Brass ASTM B 124 Alloy C37700<br>or ASTM B 16 Alloy C36000<br>with Hard Chrome Plate |
| 8. Seat Ring (2)       | Reinforced TFE   |
| 9. Body                | Chrome Plated Bronze<br>ASTM B 584 Alloy C84400                                      |
| 10. Body End Piece     | Chrome Plated Bronze<br>ASTM B 584 Alloy C84400                                      |



**T-585-70-CP**  
Threaded



**T-585-70-CP**  
NPT x NPT

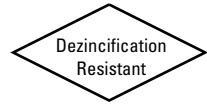
## DIMENSIONS—WEIGHTS—QUANTITIES

| Size  | Dimensions |      |     |      | T-585-70-CP |      | Master Ctn. | Qty. |    |      |      |     |
|-------|------------|------|-----|------|-------------|------|-------------|------|----|------|------|-----|
|       | A          | B    | C   | D    | Lbs.        | Kg.  |             |      |    |      |      |     |
| 1/4   | 8          | 2.00 | 51  | 1.75 | 44          | 5.00 | 127         | .38  | 10 | .45  | .21  | 100 |
| 3/8   | 10         | 2.00 | 51  | 1.75 | 44          | 5.00 | 127         | .38  | 10 | .45  | .20  | 100 |
| 1/2   | 15         | 2.44 | 62  | 1.88 | 48          | 5.19 | 132         | .50  | 13 | .64  | .29  | 100 |
| 3/4   | 20         | 2.94 | 75  | 2.25 | 57          | 6.25 | 159         | .75  | 19 | 1.42 | .64  | 50  |
| 1     | 25         | 3.34 | 85  | 2.38 | 60          | 6.44 | 164         | 1.00 | 25 | 1.79 | .81  | 40  |
| 1 1/4 | 32         | 4.19 | 106 | 3.00 | 76          | 6.75 | 171         | 1.25 | 32 | 3.12 | 1.41 | 20  |
| 1 1/2 | 40         | 4.72 | 120 | 3.16 | 80          | 9.06 | 230         | 1.50 | 38 | 4.78 | 2.17 | 10  |
| 2     | 50         | 5.16 | 131 | 3.50 | 89          | 9.25 | 235         | 2.00 | 51 | 6.68 | 3.03 | 8   |

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim • 3/4" Hose Connection with Cap and Chain • Blowout-Proof Stem



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**

CONFORMS TO MSS SP-110

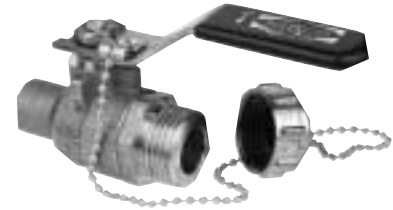
### MATERIAL LIST

| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle Nut          | Zinc Plated Steel  |
| 2. Handle              | Zinc Plated Steel Clear Chromate Plastisol Coated                              |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000   |
| 4. Packing             | TFE  |
| 5. Thrust Washer       | Reinforced TFE   |
| 6. Stem                | Silicon Bronze ASTM B 371 Alloy C69400 or ASTM B 99 Alloy C65100               |
| 7. Ball                | Brass ASTM B 124 Alloy C37700 or ASTM B 16 Alloy C36000 with Hard Chrome Plate |
| 8. Seat Ring (2)       | Reinforced TFE   |
| 9. Body                | Bronze ASTM B 584 Alloy C84400   |
| 10. Hose Body End      | ASTM B 124 Alloy C37700  |
| 11. Cap                | Die Cast Brass   |
| 12. Gasket             | Rubber   |
| 13. Chain              | Brass  |

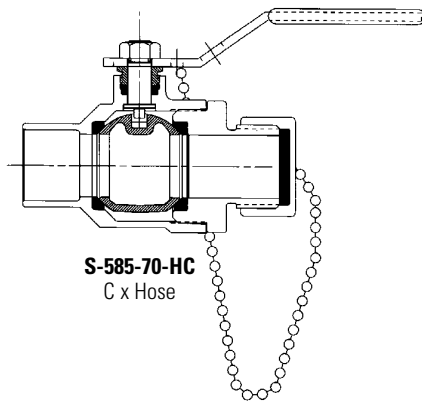
<sup>1</sup> Cap is for hose end thread protection only. Not to be used for pressure containing purposes.



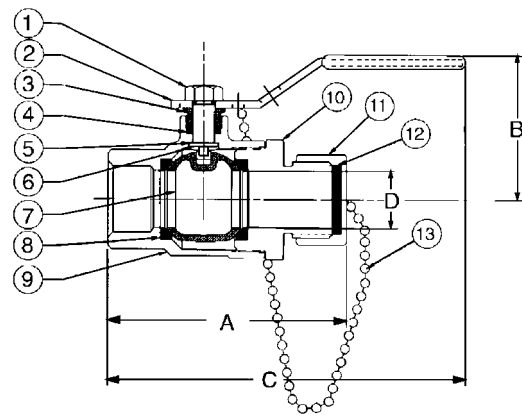
**T-585-70-HC**  
Threaded x Hose



**S-585-70-HC**  
Solder x Hose



**S-585-70-HC**  
C x Hose



**T-585-70-HC**  
NPT x Hose

## DIMENSIONS—WEIGHTS—QUANTITIES

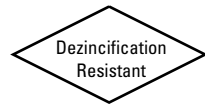
| Size    | Dimensions  |         |             |         |             |         |             |         |         |          |             |          |             |      | Master Ctn. Qty. |      |     |     |
|---------|-------------|---------|-------------|---------|-------------|---------|-------------|---------|---------|----------|-------------|----------|-------------|------|------------------|------|-----|-----|
|         | T-585-70-HC |         | S-585-70-HC |         | T-585-70-HC |         | S-585-70-HC |         | D       |          | T-585-70-HC |          | S-585-70-HC |      |                  |      |     |     |
| In. mm. | In. mm.     | In. mm. | In. mm.     | In. mm. | In. mm.     | In. mm. | In. mm.     | In. mm. | In. mm. | Lbs. Kg. | Lbs. Kg.    | Lbs. Kg. | Lbs. Kg.    |      |                  |      |     |     |
| 1/2     | 15          | 2.84    | 72          | 2.90    | 74          | 1.88    | 48          | 5.19    | 132     | 5.25     | 133         | .50      | 13          | .80  | .36              | .74  | .34 | 100 |
| 3/4     | 20          | 3.31    | 84          | 3.47    | 88          | 2.25    | 57          | 6.25    | 159     | 6.25     | 159         | .75      | 19          | 1.46 | .66              | 1.42 | .65 | 50  |

Note: Solder end is designed to be soft-soldered into lines using solders with the melting point not exceeding 500°F. Higher temperature solders will damage the seat material. See installation sheet packaged with valves.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Full Port • Stainless Trim • 3/4" Hose Connection with Cap and Chain • Blowout-Proof Stem



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**

CONFORMS TO MSS SP-110

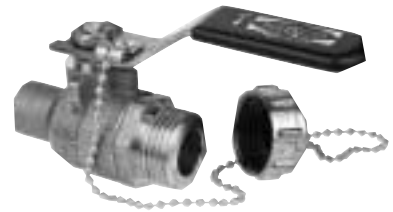
### MATERIAL LIST

| PART                   | SPECIFICATION   |
|------------------------|---|
| 1. Handle Nut          | Stainless Steel 300 Series                                  |
| 2. Handle              | Zinc Plated Steel Clear Chromate Plastisol Coated           |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000                                |
| 4. Packing             | TFE   |
| 5. Thrust Washer       | Reinforced TFE  |
| 6. Stem                | Stainless Steel ASTM A 276 Type 316                         |
| 7. Ball                | Stainless Steel ASTM A 276 Type 316 or ASTM A 351 Type CF8M |
| 8. Seat Ring (2)       | Reinforced TFE  |
| 9. Body                | Bronze ASTM B 584 Alloy C84400                              |
| 10. Hose Body End      | ASTM B 124 Alloy C37700                                     |
| 11. Cap                | Die Cast Brass  |
| 12. Gasket             | Rubber  |
| 13. Chain              | Brass   |

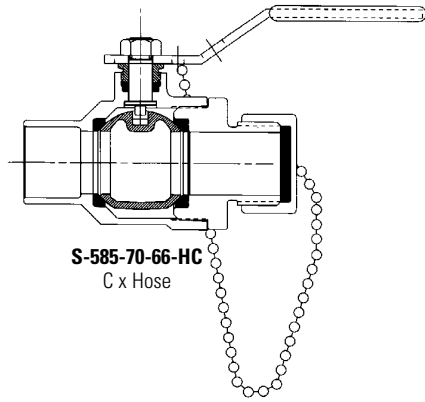
<sup>1</sup> Cap is for hose end thread protection only. Not to be used for pressure containing purposes.



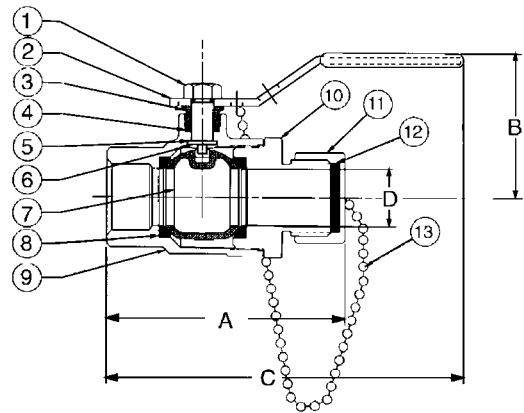
**T-585-70-66-HC**  
NPT x Hose



**S-585-70-66-HC**  
C x Hose



**S-585-70-66-HC**  
C x Hose



**T-585-70-66-HC**  
NPT x Hose

## DIMENSIONS—WEIGHTS—QUANTITIES

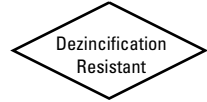
| Size | Dimensions |      |    |      |    |      |    |      |     |      | T-585-70-66-HC |     | S-585-70-66-HC |      | Master Ctn. Qty. |      |     |     |
|------|------------|------|----|------|----|------|----|------|-----|------|----------------|-----|----------------|------|------------------|------|-----|-----|
|      | A          |      | A  |      | B  |      | C  |      | C   |      | D              |     | Lbs.           | Kg.  |                  | Lbs. | Kg. |     |
| 1/2  | 15         | 2.84 | 72 | 2.90 | 74 | 1.88 | 48 | 5.19 | 132 | 5.25 | 133            | .50 | 13             | .80  | .36              | .74  | .34 | 100 |
| 3/4  | 20         | 3.31 | 84 | 3.47 | 88 | 2.25 | 57 | 6.25 | 159 | 6.25 | 159            | .75 | 19             | 1.46 | .66              | 1.42 | .65 | 50  |

Note: Solder end is designed to be soft-soldered into lines using solders with the melting point not exceeding 500°F. Higher temperature solders will damage the seat material. See installation sheet packaged with valves.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim • Single Union Ends •  
Blowout-Proof Stem



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**150 PSI/10.3 Saturated Steam**♦

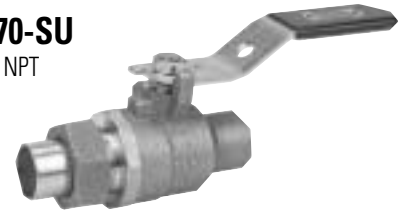
CONFORMS TO MSS SP-110

## MATERIAL LIST

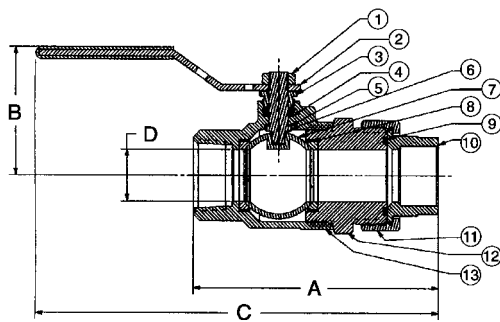
| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle Nut          | Zinc Plated Steel  |
| 2. Handle              | Zinc Plated Steel Clear Chromate<br>Plastisol Coated                                 |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000   |
| 4. Packing             | TFE  |
| 5. Thrust Washer       | Reinforced TFE   |
| 6. Stem                | Silicon Bronze ASTM B 371 Alloy C69400<br>or ASTM B 99 Alloy C65100                  |
| 7. Ball                | Brass ASTM B 124 Alloy C37700<br>or ASTM B 16 Alloy C36000<br>with Hard Chrome Plate |
| 8. Seat Ring (2)       | Reinforced TFE   |
| 9. O-Ring              | Viton  |
| 10. Tail Piece         | ASTM B 124 Alloy C37700  |
| 11. Union Nut          | ASTM B 124 Alloy C37700<br>or ASTM B 584 Alloy C84400                                |
| 12. Body End           | ASTM B 124 Alloy C37700  |
| 13. Body               | Bronze ASTM B 584 Alloy C84400   |



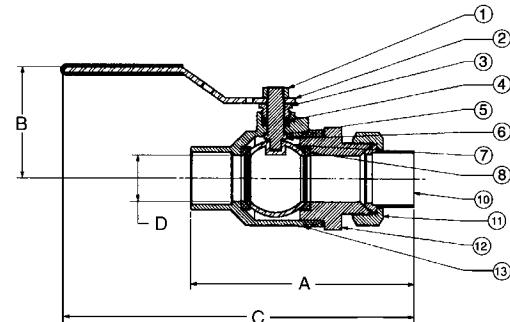
**T-585-70-SU**  
NPT x NPT



**S-585-70-SU**  
C x C



**T-585-70-SU**  
NPT x NPT



**S-585-70-SU**  
C x C

## DIMENSIONS—WEIGHTS—QUANTITIES

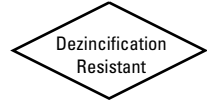
### Dimensions

| Size | T-585-70-SU |      | S-585-70-SU |      | T-585-70-SU |      | S-585-70-SU |       | D   | T-585-70-SU |     | S-585-70-SU |     | Master Ctn. | Qty. |      |      |    |
|------|-------------|------|-------------|------|-------------|------|-------------|-------|-----|-------------|-----|-------------|-----|-------------|------|------|------|----|
|      | In.         | mm.  | In.         | mm.  | In.         | mm.  | In.         | mm.   |     | Lbs.        | Kg. | Lbs.        | Kg. |             |      |      |      |    |
| ½    | 15          | 3.57 | 91          | 3.32 | 84          | 1.88 | 48          | 6.22  | 158 | 6.00        | 152 | .50         | 13  | .64         | .29  | .60  | .27  | 40 |
| ¾    | 20          | 4.13 | 105         | 4.20 | 107         | 2.25 | 57          | 7.28  | 185 | 7.25        | 184 | .75         | 19  | 1.33        | .60  | 1.27 | .58  | 20 |
| 1    | 25          | 4.70 | 119         | 5.00 | 127         | 2.38 | 60          | 7.66  | 195 | 7.83        | 199 | 1.00        | 25  | 1.79        | .81  | 1.72 | .78  | 20 |
| 1¼   | 32          | 5.38 | 137         | 6.09 | 155         | 3.00 | 76          | 9.97  | 253 | 10.23       | 260 | 1.25        | 32  | 2.17        | .98  | 3.18 | 1.44 | 10 |
| 1½   | 40          | 6.06 | 154         | 7.09 | 180         | 3.16 | 80          | 10.40 | 264 | 10.81       | 275 | 1.50        | 38  | 3.27        | 1.48 | 5.12 | 2.32 | 6  |
| 2    | 50          | 6.38 | 162         | 7.66 | 195         | 3.50 | 89          | 10.50 | 267 | 10.97       | 279 | 2.00        | 51  | 5.09        | 2.31 | 7.10 | 3.22 | 4  |

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim • Single Union Ends • Blowout-Proof Stem



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**150 PSI/10.3 Bar Saturated Steam**♦

CONFORMS TO MSS SP-110

## MATERIAL LIST

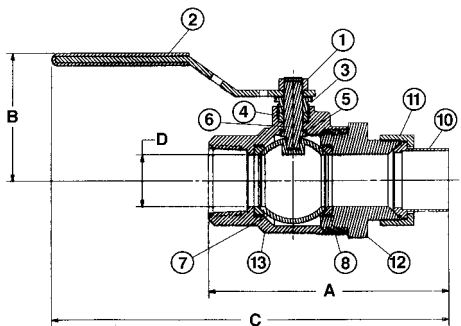
| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle Nut          | Zinc Plated Steel  |
| 2. Handle              | Zinc Plated Steel Clear Chromate<br>Plastisol Coated                                 |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000   |
| 4. Packing             | TFE  |
| 5. Thrust Washer       | Reinforced TFE   |
| 6. Stem                | Silicon Bronze ASTM B 371 Alloy C69400<br>or ASTM B 99 Alloy C65100                  |
| 7. Ball                | Brass ASTM B 124 alloy C37700<br>or ASTM B 16 Alloy C36000<br>with Hard Chrome Plate |
| 8. Seat Ring (2)       | Reinforced TFE   |
| 9. O-Ring              | Viton  |
| 10. Tail Piece         | ASTM B 124 Alloy C37700  |
| 11. Union Nut          | ASTM B 124 Alloy C37700<br>or ASTM B 584 Alloy C84400                                |
| 12. Body End           | ASTM B 124 Alloy C37700  |
| 13. Body               | Bronze ASTM B 584 Alloy C84400   |



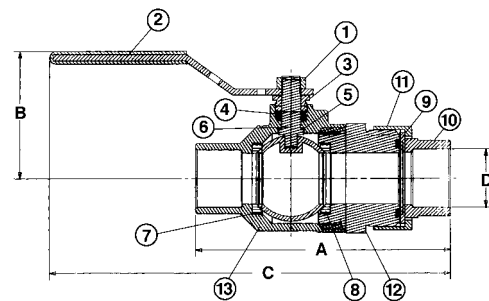
**TS-585-70-SU**  
Threaded x Solder



**ST-585-70-SU**  
Solder x Threaded



**TS-585-70-SU**  
NPT x C



**ST-585-70-SU**  
C x NPT

## DIMENSIONS—WEIGHTS—QUANTITIES

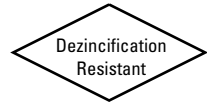
### Dimensions

| Size | ST-585-70-SU |         | TS-585-70-SU |         | ST-585-70-SU |         | TS-585-70-SU |         | D   | ST-585-70-SU |          | TS-585-70-SU |          | Master Ctn. Qty. |      |      |      |    |
|------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|-----|--------------|----------|--------------|----------|------------------|------|------|------|----|
|      | In. mm.      | In. mm. | In. mm.      | In. mm. | In. mm.      | In. mm. | In. mm.      | In. mm. |     | Lbs. Kg.     | Lbs. Kg. | Lbs. Kg.     | Lbs. Kg. |                  |      |      |      |    |
| ½    | 15           | 3.53    | 90           | 3.21    | 82           | 1.88    | 48           | 6.22    | 158 | 6.00         | 152      | .50          | 132      | 1.21             | .55  | 1.21 | .55  | 40 |
| ¾    | 20           | 4.22    | 107          | 4.10    | 104          | 2.25    | 57           | 7.28    | 185 | 7.25         | 184      | .75          | 19       | 1.84             | .84  | 1.84 | .84  | 20 |
| 1    | 25           | 4.86    | 123          | 4.91    | 125          | 2.38    | 60           | 7.66    | 195 | 7.83         | 199      | 1.00         | 25       | 2.91             | 1.32 | 2.91 | 1.32 | 20 |
| 1¼   | 32           | 5.79    | 147          | 5.63    | 143          | 3.00    | 76           | 9.97    | 253 | 10.23        | 260      | 1.25         | 32       | 4.39             | 2.00 | 4.39 | 2.00 | 10 |
| 1½   | 40           | 6.63    | 168          | 6.28    | 160          | 3.16    | 80           | 10.40   | 264 | 10.81        | 275      | 1.50         | 38       | 6.44             | 2.93 | 6.44 | 2.93 | 6  |
| 2    | 50           | 7.10    | 180          | 6.89    | 175          | 3.50    | 89           | 10.50   | 267 | 10.91        | 277      | 2.00         | 51       | 9.44             | 4.29 | 9.44 | 4.29 | 4  |

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • 250 Steam Rating • Full Port • 316SS Trim •  
Carbon-Filled TFE Seats • Blowout-Proof Stem • Vented Ball



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**250 PSI/17.2 Bar Saturated Steam**♦

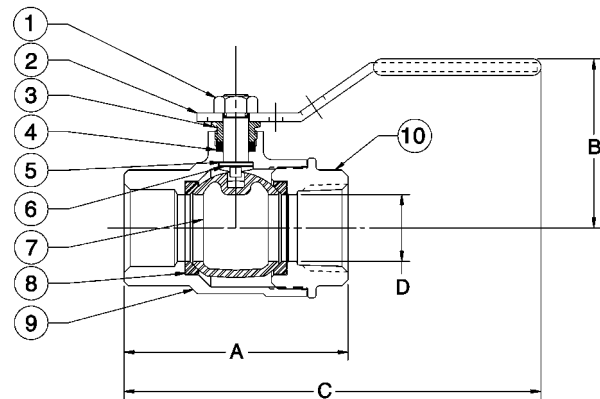
CONFORMS TO MSS SP-110

## MATERIAL LIST

| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle Nut          | 300 Series Stainless Steel                                     |
| 2. Handle              | Stainless Steel Platisol Coated                                |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000                                   |
| 4. Packing             | Carbon Filled TFE  |
| 5. Thrust Washer       | Carbon Filled TFE  |
| 6. Stem                | Stainless Steel ASTM A 276 Type 316                            |
| 7. Ball (Vented)       | Stainless Steel ASTM A 276 Type 316<br>or ASTM A 351 Type CF8M |
| 8. Seat Ring (2)       | Carbon Filled TFE  |
| 9. Body                | Bronze ASTM B 61 Alloy C92200                                  |
| 10. Body End Piece     | Bronze ASTM B 584 Alloy C84400                                 |



**T-585-70-66-ST**  
Threaded



**T-585-70-66-ST**  
NPT x NPT

## DIMENSIONS—WEIGHTS—QUANTITIES

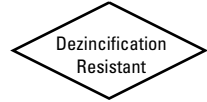
| Size | Dimensions |      |     |      | T-585-70-66-ST |      | Master Ctn. Qty. |      |    |      |      |    |
|------|------------|------|-----|------|----------------|------|------------------|------|----|------|------|----|
|      | A          | B    | C   | D    | Lbs.           | Kg.  |                  |      |    |      |      |    |
| ½    | 15         | 2.44 | 62  | 1.88 | 48             | 5.19 | 132              | .50  | 13 | .64  | .29  | 10 |
| ¾    | 20         | 2.94 | 75  | 2.25 | 57             | 6.25 | 159              | .75  | 19 | 1.33 | .60  | 5  |
| 1    | 25         | 3.34 | 85  | 2.38 | 61             | 6.44 | 164              | 1.00 | 25 | 1.79 | .81  | 5  |
| 1¼   | 32         | 4.19 | 106 | 3.00 | 76             | 6.75 | 171              | 1.25 | 32 | 2.17 | .98  | 5  |
| 1½   | 40         | 4.72 | 120 | 3.16 | 80             | 9.06 | 230              | 1.50 | 38 | 3.27 | 1.48 | 5  |
| 2    | 50         | 5.16 | 131 | 3.50 | 89             | 9.25 | 235              | 2.00 | 51 | 5.09 | 2.31 | 2  |

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.



# Bronze Integral Ball Check Valves

Two-Piece Body • Full Port • Blowout-Proof Stem



**250 PSI/17.2 Bar Non-Shock Cold Working Pressure**

BALL VALVE  
CONFORMS TO MSS SP-110

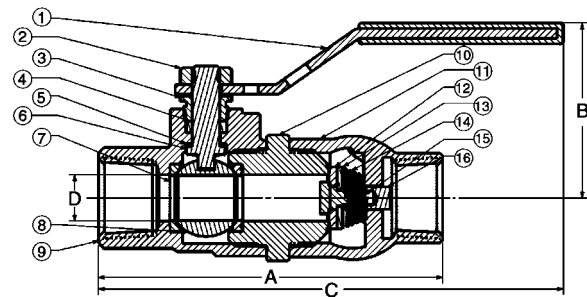
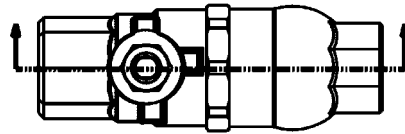
### MATERIAL LIST

| PART                   | SPECIFICATION   |
|------------------------|---|
| 1. Handle              | Zinc Plated Steel Clear Chromate<br>Plastisol Coated                              |
| 2. Handle Nut          | Zinc Plated Steel   |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000  |
| 4. Packing             | TFE   |
| 5. Thrust Washer       | Reinforced TFE  |
| 6. Stem                | Silicon Bronze ASTM B 371 Alloy C69400<br>or ASTM B 99 Alloy C65100               |
| 7. Seat Ring (2)       | Reinforced TFE  |
| 8. Ball                | Brass ASTM B 124 Alloy C37700 or ASTM<br>B 16 Alloy C36000 with Hard Chrome Plate |
| 9. Main Body           | Bronze ASTM B 584 Alloy C84400  |
| 10. Coupling           | ASTM B 124 Alloy C37700   |
| 11. Check Valve Body   | Bronze ASTM B 584 Alloy C84400  |
| 12. Soft Disc          | Buna-N  |
| 13. Disc Holder        | Stainless Steel Type 301  |
| 14. Spring             | Stainless Steel ASTM A 276 Type 316   |
| 15. Seat Screw         | Stainless Steel ASTM A 276 Alloy S43000   |
| 16. Valve Stem         | Stainless Steel ASTM A 582 Alloy C30300   |

Note: Buna disc installed in check valve. Maximum temperature of Buna is 180° F.



**T-585-70-IC**  
Threaded



**T-585-70-IC**  
NPT x NPT

### DIMENSIONS—WEIGHTS—QUANTITIES

| Size    | Dimensions |         |          |         | T-585-70-IC | Master    |
|---------|------------|---------|----------|---------|-------------|-----------|
|         | A          | B       | C        | D       |             |           |
| In. mm. | In. mm.    | In. mm. | In. mm.  | In. mm. | Lbs. Kg.    | Ctn. Qty. |
| ½ 15    | 3.85 98    | 1.88 48 | 5.19 132 | .50 15  | 1.05 .48    | 40        |
| ¾ 20    | 4.40 112   | 2.25 57 | 6.25 159 | .75 20  | 1.76 .80    | 25        |
| 1 25    | 5.11 130   | 2.38 60 | 6.44 164 | 1.00 25 | 2.54 1.15   | 10        |
| 1¼ 32   | 6.08 154   | 3.00 76 | 6.75 171 | 1.25 32 | 4.25 1.93   | 10        |
| 1½ 40   | 6.91 176   | 3.16 80 | 9.06 230 | 1.50 40 | 5.84 2.65   | 6         |
| 2 50    | 7.56 192   | 3.50 89 | 9.25 235 | 2.00 50 | 8.33 3.79   | 4         |

**Check Valve Cracking Pressure**

½" requires 1½ pounds pressure to open

¾" - 2" requires ½ pound pressure to open

# Bronze Ball Valves

Two-Piece Body • Full Port ¼"-1" • Conventional Port 1¼"-2" • Bronze Trim • Safety Vent<sup>®</sup> for Pneumatic Applications • Blowout-Proof Stem

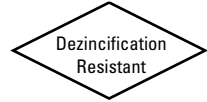
**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**

CONFORMS TO MSS SP-110 • O.S.H.A. 1910.147

## MATERIAL LIST

| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle Nut          | Zinc Plated Steel  |
| 2. Handle              | Zinc Plated Steel Clear Chromate Plastisol Coated                              |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000   |
| 4. Packing             | TFE  |
| 5. Stem                | Silicon Bronze ASTM B 371 Alloy C69400 or ASTM B 99 Alloy C65100               |
| 6. Thrust Washer       | Reinforced TFE   |
| 7. Ball                | Brass ASTM B 124 Alloy C37700 or ASTM B 16 Alloy C36000 with Hard Chrome Plate |
| 8. Seat Ring (2)       | Reinforced TFE   |
| 9. Body                | Bronze ASTM B 584 Alloy C84400   |
| 10. Body End Piece     | Bronze ASTM B 584 Alloy C84400   |
| 11. Locking Device     | 300 Series Stainless Steel   |

Note: A Buna O-ring is installed on the upstream side behind the seat ring. Maximum temperature of Buna is 180° F. (Not Shown)

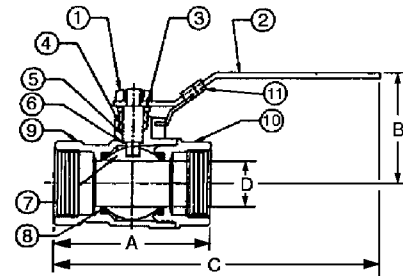


### T-585-70-SV

¼"-1" Full Port  
Threaded

### T-580-70-SV

1¼"-2" Conventional Port  
Threaded



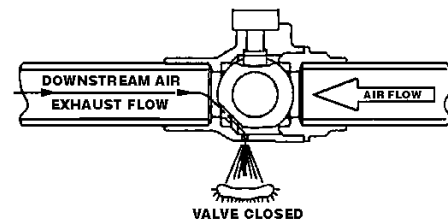
T-585-70-SV  
T-580-70-SV  
NPT x NPT

## DIMENSIONS—WEIGHTS—QUANTITIES

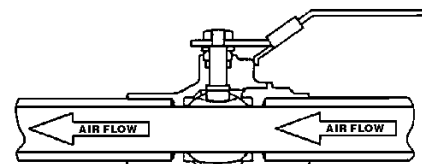
| Size    | Dimensions |         |          |         | T-585-70-SV |          | Master Ctn. Qty. |
|---------|------------|---------|----------|---------|-------------|----------|------------------|
|         | A          | B       | C        | D       | T-580-70-SV | Lbs. Kg. |                  |
| In. mm. | In. mm.    | In. mm. | In. mm.  | In. mm. | Lbs. Kg.    |          |                  |
| † ¼ 8   | 2.00 51    | 1.75 44 | 5.00 127 | .38 10  | .49 .22     | 100      |                  |
| † ⅜ 10  | 2.00 51    | 1.75 44 | 5.00 127 | .38 10  | .48 .22     | 100      |                  |
| † ½ 15  | 2.44 62    | 1.88 48 | 5.19 132 | .50 13  | .68 .31     | 100      |                  |
| † ¾ 20  | 2.94 75    | 2.25 57 | 6.25 159 | .75 19  | 1.38 .63    | 50       |                  |
| † 1 25  | 3.34 85    | 2.38 60 | 6.44 164 | 1.00 25 | 1.99 .90    | 40       |                  |
| 1 ¼ 32  | 3.94 100   | 2.63 67 | 6.75 171 | 1.00 25 | 2.37 1.07   | 20       |                  |
| 1 ½ 40  | 4.31 109   | 3.00 76 | 8.88 226 | 1.25 32 | 3.57 1.62   | 20       |                  |
| 2 50    | 4.63 118   | 3.16 80 | 9.06 230 | 1.50 38 | 5.20 2.36   | 10       |                  |

NIBCO T-585-70-SV Safety Vent<sup>®</sup> lock-out ball valves provide positive energy isolation per O.S.H.A. standard 1910.147. Valves lock in closed position only. For compressed air. To order specify T-585-70-SV/T-580-70-SV.

† NIBCO Supplies Full Port T-585-70-SV on this size.



VALVE CLOSED

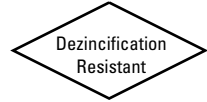


VALVE OPEN

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Full Port ¼"-1" • Conventional Port 1¼"-3" •  
Bronze Trim • Blowout-Proof Stem • UL Listed



**250 PSI/17.2 Bar Non-Shock LP Gas per UL842**

CONFORMS TO MSS SP-110 •

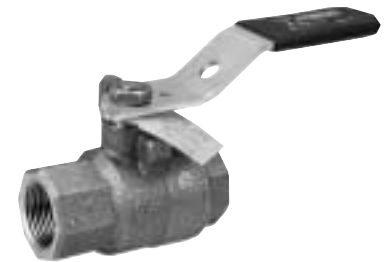
CSA CERTIFIED TO ANSI/ASME B 16.33 AND CGA 3.16  
FOR NATURAL AND PROPANE GAS TO 125 PSIG (¼"-1")

### MATERIAL LIST

| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle Nut          | Zinc Plated Steel  |
| 2. Handle              | Zinc Plated Steel Clear Chromate<br>Plastisol Coated                                 |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000   |
| 4. Packing             | TFE  |
| 5. Stem                | Silicon Bronze ASTM B 371 Alloy C69400<br>or ASTM B 99 Alloy C65100                  |
| 6. Thrust Washer       | Reinforced TFE   |
| 7. Ball                | Brass ASTM B 124 Alloy C37700<br>or ASTM B 16 Alloy C36000<br>with Hard Chrome Plate |
| 8. Seat Ring (2)       | Reinforced TFE   |
| 9. Body                | Bronze ASTM B 584 Alloy C84400   |
| 10. Body End Piece     | Bronze ASTM B 584 Alloy C84400   |



**T-585-70-UL**  
¼"-1" Full Port CSA  
Threaded



**T-580-70-UL**  
1¼"-3" Conventional Port  
Threaded

#### UL Listed For:

YSDT LP gas shut-off  
YQNZ Compressed gas shut-off  
YRPV Gas shut-off  
YRBX Flammable liquid shut-off  
MHKZ Manual valves

#### Service

A - Air or non-toxic, non-flammable gas  
G - City gas supplied by public utilities  
GA - Gasoline  
LP - Liquefied petroleum gas, 250 PSI max.  
O2 - No. 1 and 2 fuel oil  
O4 - No. 4 fuel oil  
O5 - No. 5 fuel oil  
O6 - No. 6 fuel oil

#### CUL Listed For:

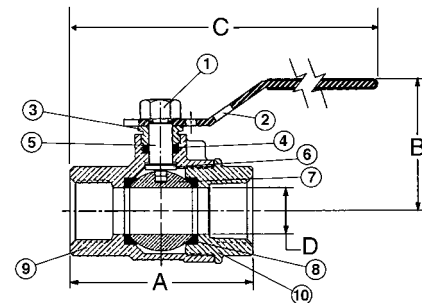
YSDT7 LP gas shut-off for Canada



### DIMENSIONS—WEIGHTS—QUANTITIES

| Size | Dimensions |      |     |      | T-585-70-UL |       | D   | T-580-70-UL | Master |       |      |     |
|------|------------|------|-----|------|-------------|-------|-----|-------------|--------|-------|------|-----|
|      | A          | B    | C   | D    | Lbs.        | Kg.   |     |             |        |       |      |     |
| †¼   | 8          | 2.00 | 51  | 1.75 | 44          | 5.00  | 127 | .38         | 10     | .45   | .21  | 100 |
| †⅜   | 10         | 2.00 | 51  | 1.75 | 44          | 5.00  | 127 | .38         | 10     | .45   | .20  | 100 |
| †½   | 15         | 2.44 | 62  | 1.88 | 48          | 5.19  | 132 | .50         | 13     | .64   | .29  | 100 |
| †¾   | 20         | 2.94 | 75  | 2.25 | 57          | 6.25  | 159 | .75         | 19     | 1.33  | .60  | 50  |
| †1   | 25         | 3.34 | 85  | 2.38 | 60          | 6.44  | 164 | 1.00        | 25     | 1.79  | .81  | 40  |
| 1¼   | 32         | 3.94 | 100 | 2.63 | 67          | 6.75  | 171 | 1.00        | 25     | 2.17  | .98  | 20  |
| 1½   | 40         | 4.31 | 109 | 3.00 | 76          | 8.88  | 226 | 1.25        | 32     | 3.27  | 1.48 | 20  |
| 2    | 50         | 4.63 | 118 | 3.16 | 80          | 9.06  | 230 | 1.50        | 38     | 5.09  | 2.31 | 10  |
| 2½   | 65         | 5.84 | 148 | 3.50 | 89          | 9.66  | 245 | 2.00        | 51     | 8.25  | 3.74 | 6   |
| 3    | 80         | 7.09 | 180 | 4.41 | 112         | 11.53 | 293 | 2.50        | 64     | 15.65 | 7.10 | 4   |

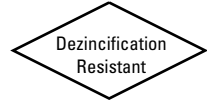
† NIBCO Supplies Full Port T-585-70-UL on this size.



**T-585-70-UL**  
**T-580-70-UL**  
NPT x NPT

# Bronze Ball Valves

Two-Piece Body • Full Port • 316SS Trim • Blowout-Proof Stem •  
ISO Direct-Mount Pad for Actuation • Vented Ball



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**150 PSI/10.3 Bar Saturated Steam\***

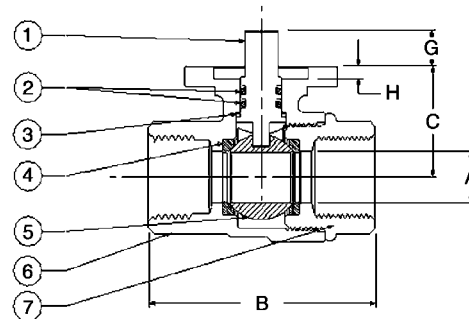
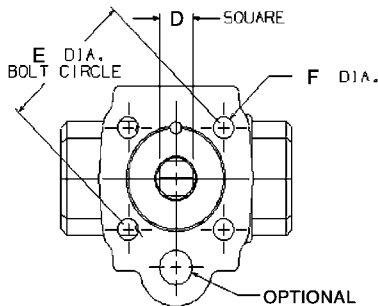
CONFORMS TO MSS SP-110 •  
ACTUATOR MOUNT PER ISO 5211

### MATERIAL LIST

| PART              | SPECIFICATION  |
|-------------------|--|
| 1. Stem           | Stainless Steel ASTM A 276 Type 316                            |
| 2. O-Ring (2)     | Fluoroelastomer  |
| 3. Thrust Washer  | Reinforced TFE   |
| 4. Seat Ring (2)  | Carbon Filled TFE  |
| 5. Ball (Vented)  | Stainless Steel ASTM A 276 Type 316<br>or ASTM A 351 Type CF8M |
| 6. Body           | Bronze ASTM B 584 Alloy C84400                                 |
| 7. Body End Piece | Bronze ASTM B 584 Alloy C84400                                 |



**TM-585-70-66**  
Threaded  
with Mounting Pads



**TM-585-70-66**  
NPT x NPT

### DIMENSIONS—WEIGHTS—QUANTITIES

| Size | Flange Size | Dimensions |      |     |      |     |      |     |     |      |      | TM-585-70-66 |     | Master Ctn. Qty. |     |    |     |   |      |      |    |
|------|-------------|------------|------|-----|------|-----|------|-----|-----|------|------|--------------|-----|------------------|-----|----|-----|---|------|------|----|
|      |             | A          | B    | C   | D    | E   | F    | G   | H   | Lbs. | Kg.  |              |     |                  |     |    |     |   |      |      |    |
| In.  | mm.         | In.        | mm.  | In. | mm.  | In. | mm.  | In. | mm. | In.  | mm.  | In.          | mm. | In.              | mm. |    |     |   |      |      |    |
| ½    | 15          | F03        | .50  | 13  | 2.43 | 62  | 1.10 | 28  | .35 | 9    | 1.42 | 36           | .22 | 51               | .39 | 10 | .12 | 3 | .82  | .37  | 50 |
| ¾    | 20          | F03        | .75  | 19  | 2.94 | 75  | 1.37 | 35  | .35 | 9    | 1.42 | 36           | .22 | 51               | .39 | 10 | .12 | 3 | 1.23 | .56  | 25 |
| 1    | 25          | F04        | 1.00 | 25  | 3.33 | 85  | 1.56 | 40  | .43 | 11   | 1.65 | 42           | .22 | 51               | .47 | 12 | .12 | 3 | 1.88 | .85  | 20 |
| 1¼   | 32          | F04        | 1.25 | 32  | 4.19 | 106 | 2.04 | 52  | .43 | 11   | 1.65 | 42           | .22 | 53               | .47 | 12 | .16 | 4 | 3.06 | 1.39 | 10 |
| 1½   | 40          | F04        | 1.50 | 38  | 4.70 | 119 | 2.27 | 58  | .43 | 11   | 1.65 | 42           | .22 | 51               | .47 | 12 | .16 | 4 | 4.45 | 2.02 | 10 |
| 2    | 50          | F05        | 2.00 | 51  | 5.15 | 131 | 2.50 | 64  | .55 | 14   | 1.97 | 50           | .27 | 66               | .63 | 16 | .16 | 4 | 6.85 | 3.11 | 6  |
| †2½  | 65          | F05        | 2.00 | 51  | 5.84 | 148 | 2.50 | 64  | .55 | 14   | 1.97 | 50           | .27 | 66               | .63 | 16 | .16 | 4 | 9.00 | 4.06 | 1  |

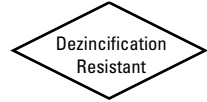
† NIBCO Supplies TM-580-70-66.

\* For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Conventional Port • 316SS Trim • Vented Ball •  
3-Point Mount Pad for Actuation • Blowout-Proof Stem

**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**150 PSI/10.3 Bar Saturated Steam**♦



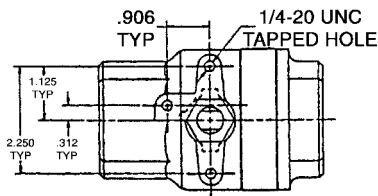
CONFORMS TO MSS SP-110

## MATERIAL LIST

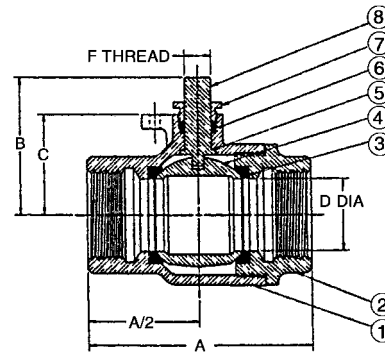
| PART                   | SPECIFICATION   |
|------------------------|---|
| 1. Body                | Bronze ASTM B 584 Alloy C84400                              |
| 2. Body End Piece      | Bronze ASTM B 584 Alloy C84400                              |
| 3. Seat Ring (2)       | Carbon Filled TFE   |
| 4. Ball (Vented)       | Stainless Steel ASTM A 276 Type 316 or ASTM A 351 Type CF8M |
| 5. Thrust Washer       | Reinforced TFE  |
| 6. Packing             | TFE   |
| 7. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000                                |
| 8. Stem                | Stainless Steel ASTM A 276 Type 316                         |



**AT-580-70-66**  
Threaded



EQUIPPED WITH (3) 1/4-20 UNC X 5/8  
LONG PHILLIPS HEAD SCREWS AND LOCK WASHERS



**AT-580-70-66**  
NPT x NPT

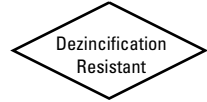
## DIMENSIONS—WEIGHTS—QUANTITIES

| Size    | Dimensions |         |         |         |         |          |      | AT-580-70-66 |   | Master Ctn. Qty. |
|---------|------------|---------|---------|---------|---------|----------|------|--------------|---|------------------|
|         | A          | B       | C       | Port D  | Flats E | F        | Lbs. | Kg.          |   |                  |
| In. mm. | In. mm.    | In. mm. | In. mm. | In. mm. | In. mm. | In.      |      |              |   |                  |
| 2½ 65   | 5.85 149   | 3.16 80 | 2.32 59 | 2.00 51 | .38 10  | ¼-18 UNF | 8.5  | 3.86         | 6 |                  |

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Full Port • 316SS Trim • Blowout-Proof Stem •  
ISO Direct-Mount Pad for Actuation • Vented Ball



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**150 PSI/10.3 Bar Saturated Steam\***

CONFORMS TO MSS SP-110 •  
ACTUATOR MOUNT PER ISO 5211

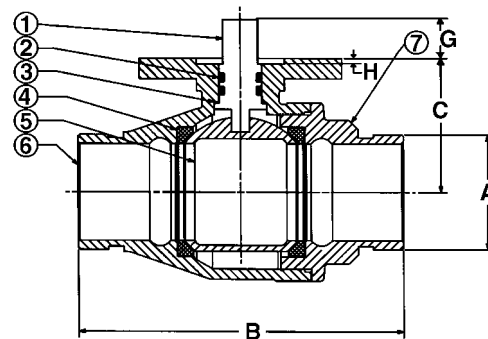
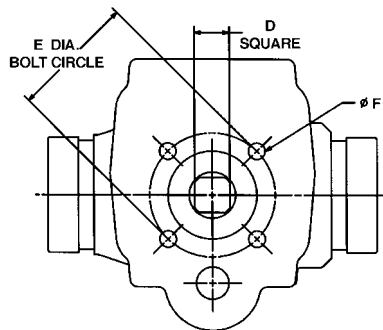
## MATERIAL LIST

| PART              | SPECIFICATION  |
|-------------------|--|
| 1. Stem           | Stainless Steel ASTM A 276 Type 316                            |
| 2. O-Ring (2)     | Fluoroelastomer  |
| 3. Thrust Washer  | Reinforced TFE   |
| 4. Seat Ring (2)  | Carbon Filled TFE  |
| 5. Ball (Vented)  | Stainless Steel ASTM A 276 Type 316<br>or ASTM A 351 Type CF8M |
| 6. Body           | Bronze ASTM B 584 Alloy C84400                                 |
| 7. Body End Piece | Bronze ASTM B 584 Alloy C84400                                 |



**GM-585-70-66**

Grooved  
with Mounting Pads



**GM-585-70-66**  
NPT x NPT

## DIMENSIONS—WEIGHTS—QUANTITIES

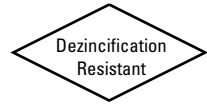
| Size | Flange Size | Dimensions |      |     |      |     |      |     |     | GM-585-70-66 |      | Master Ctn. Qty. |     |    |     |    |     |   |      |      |   |
|------|-------------|------------|------|-----|------|-----|------|-----|-----|--------------|------|------------------|-----|----|-----|----|-----|---|------|------|---|
|      |             | A          | B    | C   | D    | E   | F    | G   | H   | Lbs.         | Kg.  |                  |     |    |     |    |     |   |      |      |   |
| In.  | mm.         | In.        | mm.  | In. | mm.  | In. | mm.  | In. | mm. | In.          | mm.  | In.              | mm. |    |     |    |     |   |      |      |   |
| 2    | 50          | F05        | 2.00 | 51  | 6.31 | 171 | 2.50 | 64  | .55 | 14           | 1.97 | 50               | .27 | 66 | .63 | 16 | .16 | 4 | 7.10 | 3.23 | 6 |
| †2½  | 65          | F05        | 2.00 | 51  | 7.39 | 188 | 2.50 | 64  | .55 | 14           | 1.97 | 50               | .27 | 66 | .63 | 16 | .16 | 4 | 8.75 | 3.98 | 1 |

† NIBCO Supplies GM-580-70-66.

\* For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim • Tamper-Proof Design •  
Can Padlock Handle to Body of Valve • Blowout-Proof Stem



**600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**150 PSI/10.3 Bar Saturated Steam**♦



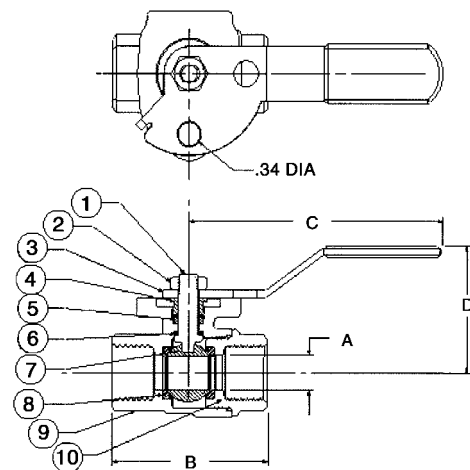
**T-585-70-PL**  
Threaded

## MATERIAL LIST

| PART               | SPECIFICATION   |
|--------------------|---|
| 1. Stem            | Silicon Bronze ASTM B 371 Alloy C69400 or ASTM B 99 Alloy C65100  |
| 2. Handle Nut      | Zinc Plated Steel   |
| 3. Handle          | Zinc Plated Steel Clear Chromate Plastisol Coated Tamper-proof Design Can Padlock Handle to Body of Valve |
| 4. Pack Gland      | Brass ASTM B 16 Alloy C36000  |
| 5. Packing         | TFE   |
| 6. Thrust Washer   | TFE   |
| 7. Ball            | Brass ASTM B 124 Alloy C37700 or ASTM B 16 Alloy C36000 with Hard Chrome Plate                            |
| 8. Seat Ring (2)   | Filled TFE  |
| 9. Body            | Bronze ASTM B 584 Alloy C84400  |
| 10. Body End Piece | Bronze ASTM B 584 Alloy C84400  |

## DIMENSIONS—WEIGHTS—QUANTITIES

| Size  | Dimensions |      |    |      | T-585-70-PL | Master |      |      |           |      |      |    |
|-------|------------|------|----|------|-------------|--------|------|------|-----------|------|------|----|
|       | A          | B    | C  | D    |             |        | Lbs. | Kg.  | Ctn. Qty. |      |      |    |
| 1/2   | 15         | .50  | 13 | 2.43 | 62          | 4.25   | 108  | 1.87 | 48        | .71  | .32  | 50 |
| 3/4   | 20         | .75  | 19 | 2.94 | 75          | 4.66   | 118  | 2.21 | 56        | 1.23 | .56  | 25 |
| 1     | 25         | 1.00 | 25 | 3.33 | 85          | 5.00   | 127  | 2.40 | 61        | 1.88 | .85  | 20 |
| 1 1/4 | 32         | 1.25 | 32 | 4.19 | 106         | 6.00   | 152  | 3.06 | 78        | 3.06 | 1.39 | 10 |
| 1 1/2 | 40         | 1.50 | 38 | 4.70 | 119         | 6.00   | 152  | 3.15 | 80        | 4.45 | 2.02 | 6  |
| 2     | 50         | 2.00 | 51 | 5.15 | 131         | 6.75   | 171  | 3.51 | 89        | 6.85 | 3.11 | 6  |

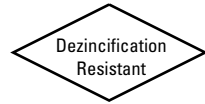


**T-585-70-PL**  
NPT x NPT

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Three-Way Body • Full Port 1/2"-1" • Conventional Port 1 1/4"-2" •  
3-Way Bronze Ball Valve • Bronze Trim • Blowout-Proof Stem



**400 PSI/27.6 Bar Non-Shock Cold Working Pressure**

CONFORMS TO MSS SP-110

## MATERIAL LIST

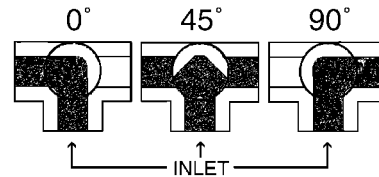
| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle              | Zinc Plated Steel Clear Chromate<br>Plastisol Coated                                 |
| 2. Handle Nut          | Stainless Steel 300 Series   |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000   |
| 4. Packing             | TFE  |
| 5. Thrust Washer       | Reinforced TFE   |
| 6. Stem                | Brass ASTM B 16 Alloy C36000   |
| 7. Seat Ring (2)       | Reinforced TFE   |
| 8. Ball                | Brass ASTM B 124 Alloy C37700<br>or ASTM B 16 Alloy C36000<br>with Hard Chrome Plate |
| 9. Body                | Bronze ASTM B 584 Alloy C84400   |
| 10. Body End Piece     | Bronze ASTM B 584 Alloy C84400   |



**T-585-70-W3**  
Threaded

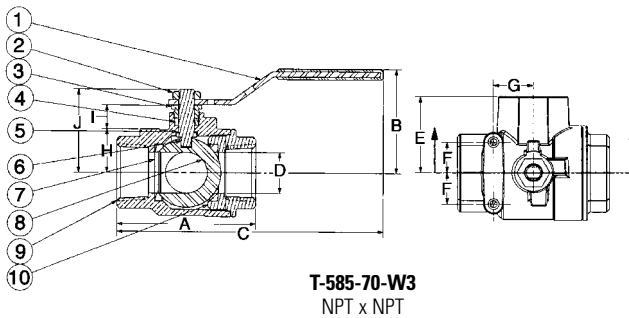


**S-585-70-W3**  
Solder

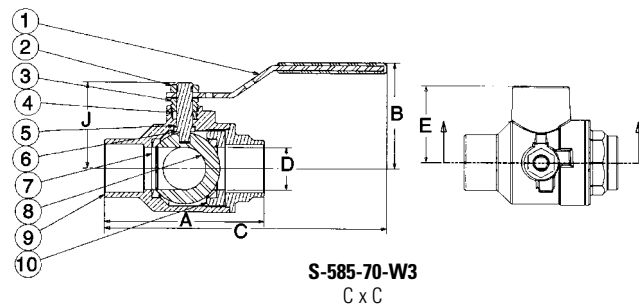


**Flow Pattern**  
Lever Position

**Note:** Open port pressure must exceed closed port pressure. If closed port pressure exceeds open port pressure, ball may be forced off of the seat ring which could allow mixing from all ports.



**T-585-70-W3**  
NPT x NPT



**S-585-70-W3**  
C x C

## DIMENSIONS—WEIGHTS—QUANTITIES

| Size   | T-585-70-W3 Dimensions |      |     |      |    |      |     |      |    |      |      | T-585-70-W3 Master |      |      |    |      |    |     |    |      |    |      |      |    |
|--------|------------------------|------|-----|------|----|------|-----|------|----|------|------|--------------------|------|------|----|------|----|-----|----|------|----|------|------|----|
|        | A                      | B    | C   | D    | E  | F    | G   | H    | I  | J    | Lbs. | Kg.                | Ctn. | Qty. |    |      |    |     |    |      |    |      |      |    |
| 1/2    | 15                     | 2.44 | 62  | 1.88 | 48 | 5.19 | 132 | .50  | 13 | 1.22 | 31   | .69                | 18   | .88  | 22 | .65  | 17 | .51 | 13 | 1.45 | 37 | .84  | .38  | 50 |
| 3/4    | 20                     | 2.94 | 75  | 2.25 | 57 | 6.25 | 159 | .75  | 19 | 1.45 | 37   | .69                | 18   | .88  | 22 | .85  | 22 | .57 | 14 | 1.80 | 46 | 1.62 | .73  | 25 |
| 1      | 25                     | 3.34 | 85  | 2.38 | 60 | 6.44 | 164 | 1.00 | 25 | 1.69 | 43   | .69                | 18   | .88  | 22 | 1.05 | 27 | .57 | 14 | 1.97 | 50 | 2.28 | 1.03 | 20 |
| †1 1/4 | 32                     | 4.19 | 106 | 3.00 | 76 | 6.75 | 171 | 1.12 | 28 | 1.98 | 50   | .75                | 19   | .94  | 24 | 1.23 | 31 | .87 | 22 | 2.60 | 66 | 4.19 | 1.90 | 10 |
| †1 1/2 | 40                     | 4.72 | 120 | 3.16 | 80 | 9.06 | 230 | 1.38 | 35 | 2.38 | 60   | .75                | 19   | .94  | 24 | 1.48 | 38 | .87 | 22 | 2.84 | 72 | 6.00 | 2.72 | 8  |
| †2     | 50                     | 5.31 | 135 | 3.50 | 89 | 9.25 | 235 | 1.88 | 48 | 2.75 | 70   | .75                | 19   | .94  | 24 | 1.88 | 48 | .70 | 18 | 3.14 | 80 | 9.03 | 4.09 | 4  |

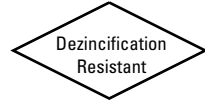
† NIBCO supplies conventional port T-580-70-W3 on this size.

| Size | S-585-70-W3 Dimensions |      |    |      |    |      |      | S-585-70-W3 |    | Master Ctn. | Qty. |      |    |      |     |    |
|------|------------------------|------|----|------|----|------|------|-------------|----|-------------|------|------|----|------|-----|----|
|      | A                      | B    | C  | D    | E  | J    | Lbs. | Kg.         |    |             |      |      |    |      |     |    |
| 1/2  | 15                     | 2.56 | 65 | 1.88 | 48 | 5.19 | 132  | .50         | 13 | 1.08        | 27   | 1.45 | 37 | .67  | .30 | 50 |
| 3/4  | 20                     | 3.25 | 83 | 2.25 | 57 | 6.25 | 159  | .75         | 19 | 1.50        | 38   | 1.80 | 46 | 1.35 | .61 | 25 |
| 1    | 25                     | 3.75 | 95 | 2.38 | 60 | 6.63 | 168  | 1.00        | 25 | 1.85        | 47   | 1.97 | 50 | 2.07 | .94 | 20 |



# Bronze Ball Valves

Three-Way Body • Full Port 1/2"-1" • Conventional Port 1 1/4"-2" •  
3-Way Bronze Ball Valve • 316SS Trim • Blowout-Proof Stem •  
Vented Ball



**400 PSI/27.6 Bar Non-Shock Cold Working Pressure**

CONFORMS TO MSS SP-110

### MATERIAL LIST

| PART                   | SPECIFICATION  |
|------------------------|--|
| 1. Handle              | Zinc Plated Steel Clear Chromate<br>Plastisol Coated           |
| 2. Handle Nut          | Stainless Steel 300 Series                                     |
| 3. Threaded Pack Gland | Brass ASTM B 16 Alloy C36000                                   |
| 4. Packing             | TFE  |
| 5. Thrust Washer       | Reinforced TFE   |
| 6. Stem                | Stainless Steel ASTM A 276 Type 316                            |
| 7. Seat Ring (2)       | Reinforced TFE   |
| 8. Ball (Vented)       | Stainless Steel ASTM A 276 Type 316<br>or ASTM A 351 Type CF8M |
| 9. Body                | Bronze ASTM B 584 Alloy C84400                                 |
| 10. Body End Piece     | Bronze ASTM B 584 Alloy C84400                                 |



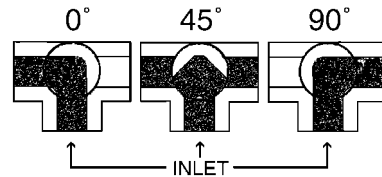
**T-585-70-66-W3**

Threaded



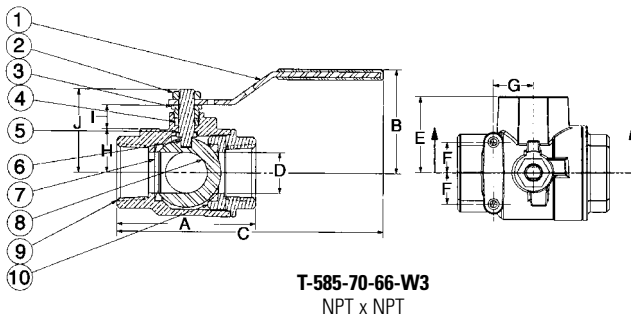
**S-585-70-66-W3**

Solder

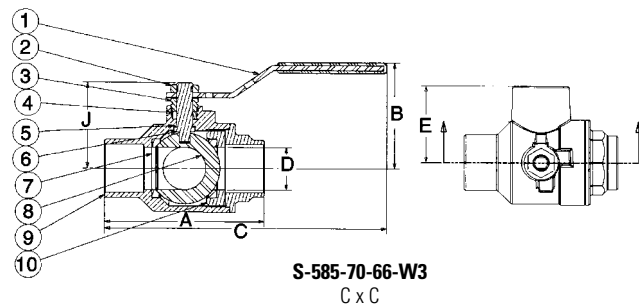


**Flow Pattern**  
Lever Position

Note: Open port pressure must exceed closed port pressure. If closed port pressure exceeds open port pressure, ball may be forced off of the seating which could allow mixing from all ports.



**T-585-70-66-W3**  
NPT x NPT



**S-585-70-66-W3**  
C x C

## DIMENSIONS—WEIGHTS—QUANTITIES

| Size    | T-585-70-66-W3 Dimensions |          |         |          |         |         |         |         |         |         |         |         | T-585-70-66-W3 |         | Master Ctn. Qty. |      |           |
|---------|---------------------------|----------|---------|----------|---------|---------|---------|---------|---------|---------|---------|---------|----------------|---------|------------------|------|-----------|
|         | A                         | B        | C       | D        | E       | F       | G       | H       | I       | J       | Lbs.    | Kg.     |                |         |                  |      |           |
| In. mm. | In. mm.                   | In. mm.  | In. mm. | In. mm.  | In. mm. | In. mm. | In. mm. | In. mm. | In. mm. | In. mm. | In. mm. | In. mm. | In. mm.        | In. mm. | Lbs.             | Kg.  | Ctn. Qty. |
| 1/2     | 15 2.44                   | 62 1.88  | 48 5.19 | 132 1.22 | 13 1.22 | 31 .69  | 18 .88  | 22 .65  | 17 .51  | 13 .51  | 13 1.45 | 37 1.45 | 37 1.45        | 37 1.45 | .84              | .38  | 50        |
| 3/4     | 20 2.94                   | 75 2.25  | 57 6.25 | 159 .75  | 19 1.45 | 37 .69  | 18 .88  | 22 .85  | 22 .85  | 14 .57  | 14 1.80 | 46 1.80 | 46 1.80        | 46 1.80 | 1.62             | .73  | 25        |
| 1       | 25 3.34                   | 85 2.38  | 60 6.44 | 164 1.00 | 25 1.69 | 43 .69  | 18 .88  | 22 1.05 | 27 1.05 | 14 .57  | 14 1.97 | 50 1.97 | 50 1.97        | 50 1.97 | 2.28             | 1.03 | 20        |
| †1 1/4  | 32 4.19                   | 106 3.00 | 76 6.75 | 171 1.12 | 28 1.98 | 50 .75  | 19 .94  | 24 1.23 | 31 1.23 | 22 .87  | 22 2.60 | 66 2.60 | 66 2.60        | 66 2.60 | 4.19             | 1.90 | 10        |
| †1 1/2  | 40 4.72                   | 120 3.16 | 80 9.06 | 230 1.38 | 35 2.38 | 60 .75  | 19 .94  | 24 1.48 | 38 1.48 | 22 .87  | 22 2.84 | 72 2.84 | 72 2.84        | 72 2.84 | 6.00             | 2.72 | 8         |
| †2      | 50 5.31                   | 135 3.50 | 89 9.25 | 235 1.88 | 48 2.75 | 70 .75  | 19 .94  | 24 1.88 | 48 1.88 | 18 .70  | 18 3.14 | 80 3.14 | 80 3.14        | 80 3.14 | 9.03             | 4.09 | 4         |

† NIBCO supplies conventional port T-580-70-66-W3 on this size.

| Size    | S-585-70-66-W3 Dimensions |         |         |          |         |         |         |      |     |           |  | S-585-70-66-W3 |  | Master Ctn. Qty. |
|---------|---------------------------|---------|---------|----------|---------|---------|---------|------|-----|-----------|--|----------------|--|------------------|
|         | A                         | B       | C       | D        | E       | J       | Lbs.    | Kg.  |     |           |  |                |  |                  |
| In. mm. | In. mm.                   | In. mm. | In. mm. | In. mm.  | In. mm. | In. mm. | In. mm. | Lbs. | Kg. | Ctn. Qty. |  |                |  |                  |
| 1/2     | 15 2.56                   | 65 1.88 | 48 5.19 | 132 .50  | 13 1.08 | 27 1.45 | 37 .67  | .30  |     | 50        |  |                |  |                  |
| 3/4     | 20 3.25                   | 83 2.25 | 57 6.25 | 159 .75  | 19 1.50 | 38 1.80 | 46 1.35 | .61  |     | 25        |  |                |  |                  |
| 1       | 25 3.75                   | 95 2.38 | 60 6.63 | 168 1.00 | 25 1.85 | 47 1.97 | 50 2.07 | .94  |     | 20        |  |                |  |                  |

# Bronze Ball Valves

Two-Piece Body • Standard Port • Blowout-Proof Stem • TFE Seats

**400 PSI/27.6 Bar Non-Shock Cold Working Pressure**



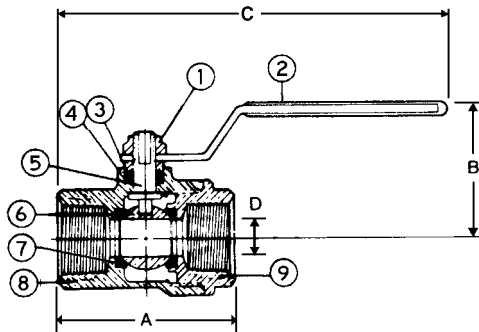
**T-580**  
Threaded



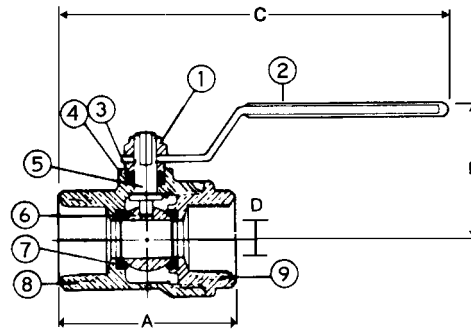
**S-580**  
Solder

## MATERIAL LIST

| PART              | SPECIFICATION   |
|-------------------|---|
| 1. Handle Nut     | Zinc Plated Steel   |
| 2. Handle         | Zinc Plated Steel Clear Chromate<br>Plastisol Coated                |
| 3. Packing Gland  | Brass ASTM B 16 Alloy C36000  |
| 4. Packing        | TFE   |
| 5. Stem           | Silicon Bronze ASTM B 371 Alloy C69400<br>or ASTM B 16 Alloy C36000 |
| 6. Ball           | Brass ASTM B 124 Alloy C37700<br>or ASTM B 16 Alloy C36000          |
| 7. Seat Rings     | TFE   |
| 8. Body           | Bronze ASTM B 584 Alloy C84400<br>or Brass ASTM B 124 Alloy C37700  |
| 9. Body End Piece | Bronze ASTM B 584 Alloy C84400<br>or Brass ASTM B 124 Alloy C37700  |



**T-580**  
NPT x NPT



**S-580**  
C x C

## DIMENSIONS—WEIGHTS—QUANTITIES

| Size    | Dimensions |          |          |         |         |          |          |         |              |          |          |          |                  |          | Master Ctn. Qty. |
|---------|------------|----------|----------|---------|---------|----------|----------|---------|--------------|----------|----------|----------|------------------|----------|------------------|
|         | T-580 A    |          | S-580 A  |         | T-580 B |          | S-580 C  |         | T-580 D Port |          | S-580    |          | Master Ctn. Qty. |          |                  |
| In. mm. | In. mm.    | In. mm.  | In. mm.  | In. mm. | In. mm. | In. mm.  | In. mm.  | In. mm. | In. mm.      | Lbs. Kg. | Lbs. Kg. | Lbs. Kg. | Lbs. Kg.         | Lbs. Kg. |                  |
| 1/2     | 15 2.00    | 51 1.94  | 49 1.56  | 40 1.56 | 40 4.88 | 124 4.84 | 123 .38  | 10 .50  | .23          | .50      | .23      | .50      | .23              | 100      |                  |
| 3/4     | 20 2.28    | 58 2.63  | 67 1.72  | 44 1.72 | 44 5.00 | 127 5.19 | 132 .50  | 13 .70  | .32          | .70      | .32      | .70      | .32              | 100      |                  |
| 1       | 25 2.88    | 73 3.21  | 82 2.06  | 52 2.06 | 52 6.06 | 154 6.28 | 160 .75  | 19 1.20 | .54          | 1.30     | .59      | 1.30     | .59              | 50       |                  |
| 1 1/4   | 32 3.41    | 87 3.81  | 97 2.31  | 59 2.31 | 59 6.34 | 161 6.56 | 167 1.00 | 25 1.80 | .82          | 1.60     | .73      | 1.60     | .73              | 40       |                  |
| 1 1/2   | 40 3.75    | 95 4.25  | 108 2.81 | 71 2.81 | 71 8.56 | 217 8.81 | 224 1.25 | 32 2.90 | 1.32         | 2.50     | 1.14     | 2.50     | 1.14             | 20       |                  |
| 2       | 50 4.44    | 113 5.21 | 132 3.06 | 78 3.06 | 78 8.88 | 226 9.25 | 235 1.50 | 38 4.30 | 1.95         | 3.60     | 1.70     | 3.60     | 1.70             | 10       |                  |

**S-580 series to be soft soldered into lines using solder with the melting point not exceeding 470° F. Higher temperature solders will damage the seat material.**

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Bronze Ball Valves

Two-Piece Body • Standard Port • Stainless Steel Trim •  
TFE Seats • Blowout-Proof Stem

**400 PSI/27.6 Bar Non-Shock Cold Working Pressure♦**



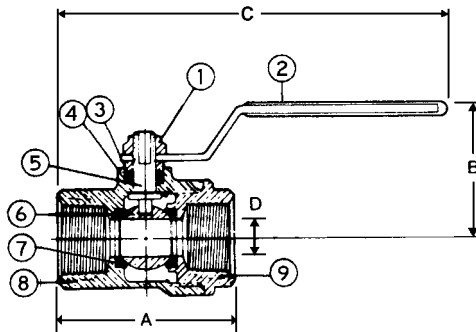
**T-580-66**  
Threaded



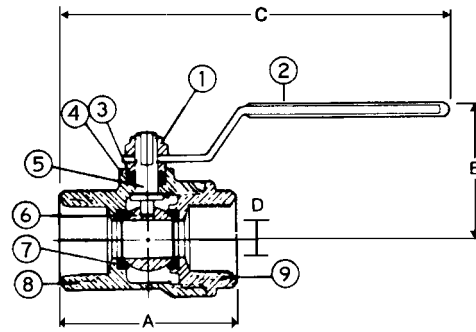
**S-580-66**  
Solder

### MATERIAL LIST

| PART              | SPECIFICATION  |
|-------------------|--|
| 1. Handle Nut     | Stainless Steel 300 Series   |
| 2. Handle         | Zinc Plated Steel Clear Chromate<br>Plastisol Coated               |
| 3. Packing Gland  | Brass ASTM B 16 Alloy C36000                                       |
| 4. Packing        | TFE  |
| 5. Stem           | Stainless Steel ASTM A 276 Type 316                                |
| 6. Ball (Vented)  | Stainless Steel ASTM A 276 Type 316<br>or ASTM A 351 Type CF8M     |
| 7. Seat Rings     | TFE  |
| 8. Body           | Bronze ASTM B 584 Alloy C84400<br>or Brass ASTM B 124 Alloy C37700 |
| 9. Body End Piece | Bronze ASTM B 584 Alloy C84400<br>or Brass ASTM B 124 Alloy C37700 |



**T-580-66**  
NPT x NPT



**S-580-66**  
C x C

### DIMENSIONS—WEIGHTS—QUANTITIES

| Size    | Dimensions    |         |               |         |         |         |               |         |               |         |         |         |          |      |          |      | Master<br>Ctn. Qty. |     |
|---------|---------------|---------|---------------|---------|---------|---------|---------------|---------|---------------|---------|---------|---------|----------|------|----------|------|---------------------|-----|
|         | T-580-66<br>A |         | S-580-66<br>A |         | B       |         | T-580-66<br>C |         | S-580-66<br>C |         | D Port  |         | T-580-66 |      | S-580-66 |      |                     |     |
| In. mm. | In. mm.       | In. mm. | In. mm.       | In. mm. | In. mm. | In. mm. | In. mm.       | In. mm. | In. mm.       | In. mm. | In. mm. | In. mm. | Lbs.     | Kg.  | Lbs.     | Kg.  |                     |     |
| 1/2     | 15            | 2.00    | 51            | 1.94    | 49      | 1.56    | 40            | 4.88    | 124           | 4.84    | 123     | .38     | 10       | .50  | .23      | .50  | .23                 | 100 |
| 3/4     | 20            | 2.28    | 58            | 2.63    | 67      | 1.72    | 44            | 5.00    | 127           | 5.19    | 132     | .50     | 13       | .70  | .32      | .70  | .32                 | 100 |
| 1       | 25            | 2.88    | 73            | 3.21    | 82      | 2.06    | 52            | 6.06    | 154           | 6.28    | 160     | .75     | 19       | 1.20 | .54      | 1.30 | .59                 | 50  |
| 1 1/4   | 32            | 3.41    | 87            | 3.81    | 97      | 2.31    | 59            | 6.34    | 161           | 6.56    | 167     | 1.00    | 25       | 1.80 | .82      | 1.60 | .73                 | 40  |
| 1 1/2   | 40            | 3.75    | 95            | 4.25    | 108     | 2.81    | 71            | 8.56    | 217           | 8.81    | 224     | 1.25    | 32       | 2.90 | 1.32     | 2.50 | 1.14                | 20  |
| 2       | 50            | 4.44    | 113           | 5.21    | 132     | 3.06    | 78            | 8.88    | 226           | 9.25    | 235     | 1.50    | 38       | 4.30 | 1.95     | 3.60 | 1.70                | 10  |

S-580 series to be soft soldered into lines using solder with the melting point not exceeding 470° F.  
Higher temperature solders will damage the seat material.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 46.

# Brass Ball Valves

Two-Piece Body • Full Port • Blowout-Proof Stem • TFE Seats

**1/4"-2" 600 PSI/41.4 Bar Non-Shock Cold Working Pressure**  
**2 1/2"-4" 400 PSI/27.6 Bar Non-Shock Cold Working Pressure**

CONFORMS TO MSS SP-110  
AGA 3-88 • CGA • CR 91-002 • UL SUBJECT 258

## MATERIAL LIST

| PART                   | SPECIFICATION                       |
|------------------------|-------------------------------------|
| 1. Handle              | Zinc Plated Steel with Vinyl Sleeve |
| 2. Handle Nut          | Zinc Plated Steel                   |
| 3. Threaded Pack Gland | Brass                               |
| 4. Packing             | PTFE                                |
| 5. Stem Seal           | Viton "O" Ring                      |
| 6. Thrust Washer       | PTFE                                |
| 7. Seat (2)            | PTFE                                |
| 8. Stem                | Brass                               |
| 9. Ball                | Chrome Plated Brass                 |
| 10. Body               | Forged Brass                        |
| 11. Body End Piece     | Forged Brass                        |
| 12. Body Seat          | Graphite                            |

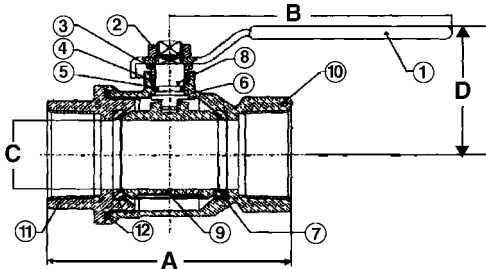
Note: AGA, CGA and UL approvals for T-FP-600 1/2"-2" only.  
CSA is now the approving agency for AGA and CGA standards.



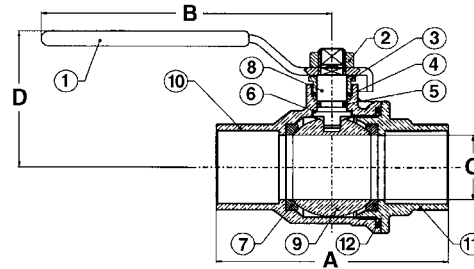
**T-FP-600**  
Threaded



**S-FP-600**  
Solder



**T-FP-600**  
NPT x NPT



**S-FP-600**  
C x C

## DIMENSIONS—WEIGHTS—QUANTITIES

| Size  | Dimensions |      |     |      |     |      |     |      |        |      | T-FP-600 |      | S-FP-600 |      | T-FP-600 |       | S-FP-600 |       |           |           |           |
|-------|------------|------|-----|------|-----|------|-----|------|--------|------|----------|------|----------|------|----------|-------|----------|-------|-----------|-----------|-----------|
|       | A          |      | A   |      | B   |      | B   |      | C Port |      | D        |      | D        |      | Lbs.     | Kg.   | Lbs.     | Kg.   | Ctn. Qty. | Ctn. Qty. |           |
| In.   | mm.        | In.  | mm. | In.  | mm. | In.  | mm. | In.  | mm.    | In.  | mm.      | In.  | mm.      | In.  | mm.      | Lbs.  | Kg.      | Lbs.  | Kg.       | Ctn. Qty. | Ctn. Qty. |
| 1/4   | 8          | 1.81 | 46  | —    | —   | 3.34 | 85  | —    | —      | .38  | 10       | 1.53 | 39       | —    | —        | .40   | .18      | —     | —         | 24        | —         |
| 3/8   | 10         | 1.81 | 46  | 1.77 | 45  | 3.34 | 85  | 3.35 | 85     | .47  | 12       | 1.53 | 39       | 1.58 | 40       | .40   | .18      | .40   | .18       | 24        | 14        |
| 1/2   | 15         | 2.31 | 59  | 2.02 | 51  | 3.34 | 85  | 3.48 | 89     | .59  | 15       | 1.63 | 41       | 1.81 | 46       | .51   | .23      | .46   | .21       | 18        | 18        |
| 3/4   | 20         | 2.66 | 67  | 2.81 | 71  | 3.34 | 85  | 3.48 | 89     | .79  | 20       | 1.78 | 45       | 1.95 | 50       | .73   | .33      | .67   | .30       | 12        | 12        |
| 1     | 25         | 3.03 | 77  | 3.35 | 85  | 4.13 | 105 | 4.19 | 107    | 1.00 | 25       | 1.97 | 50       | 2.13 | 54       | 1.19  | .54      | 1.10  | .50       | 6         | 6         |
| 1 1/4 | 32         | 3.63 | 92  | 3.86 | 98  | 4.13 | 105 | 4.19 | 107    | 1.25 | 37       | 2.19 | 56       | 2.34 | 60       | 1.72  | .78      | 1.44  | .65       | 4         | 4         |
| 1 1/2 | 40         | 4.00 | 102 | 4.43 | 113 | 5.13 | 130 | 5.12 | 130    | 1.57 | 40       | 2.72 | 69       | 2.99 | 76       | 2.50  | 1.14     | 2.31  | 1.05      | 2         | 2         |
| 2     | 50         | 4.81 | 122 | 5.49 | 140 | 5.13 | 130 | 5.94 | 151    | 2.00 | 51       | 3.00 | 76       | 3.52 | 90       | 4.25  | 1.93     | 3.83  | 1.74      | 2         | 2         |
| 2 1/2 | 65         | 5.56 | 141 | 6.38 | 162 | 9.44 | 240 | 9.90 | 252    | 2.50 | 64       | 4.25 | 108      | 4.25 | 108      | 7.00  | 3.18     | 7.30  | 3.32      | 5         | 1         |
| 3     | 75         | 6.38 | 162 | 7.36 | 187 | 9.44 | 240 | 9.90 | 252    | 3.00 | 76       | 5.00 | 127      | 4.65 | 118      | 9.40  | 4.27     | 10.40 | 4.73      | 4         | 1         |
| 4     | 100        | 7.75 | 197 | —    | —   | 9.44 | 240 | —    | —      | 4.00 | 102      | 5.50 | 140      | —    | —        | 16.50 | 7.49     | —     | —         | 4         | —         |